THE

CINCINNATI JOURNAL OF MEDICINE.

SEPTEMBER, 1866.

ANATOMY, SURGERY, AND OPHTHALMOLOGY.

By GEORGE BLACKMAN, M. D., Professor of Surgery in the Medical College of Ohio; Surgeon to St. John's Hospital; Fellow of the Royal Medical and Chirurgical Society of London.

ART. I.—*Gunshot Wounds of the Inferior Maxillary.* By D. S. YOUNG, M. D., *formerly Surgeon 21st Regiment O. V. V. I.*

THE destruction of the lower jaw, presents one of the most ghastly wounds to be met with upon the battlefield, and is much to be dreaded by the surgeon, from the uncertainty of results and the serious accidents and complications which are liable to occur during the course of treatment. In cases where the destruction is extensive, the deformity is of the most hideous character, especially when a large portion of the anterior part of the bone is destroyed, which often happens when the wound is inflicted by solid shot, pieces of shell, or the rifled musket with conical ball at short range, striking the parts at the point best calculated to produce the greatest injury. Its prominent situation, and not having a very extensive bony connection, admits of this destruction without having any of the other hard parts of the head implicated. We have seen the greater parts of the organ carried away by solid shot and fragments of shell, tearing and mutilating the tongue, and lower part of the face in the most serious manner, the sufferer surviving for a number of days, and in some cases recovering.

The person from whom the accompanying sketch was taken, was a confederate soldier wounded at Stone river, by what was supposed to be

a grape shot, and who afterward fell into our hands a prisoner. He was unable to speak or give any history of his case, except by signs or gestures. The shock had been very severe; it was supposed he had been left for dead, as most of the wounded on the part of the field where he was injured, were removed in the retreat. The drawing was made about sixteen hours after the wound was inflicted, and besides showing the destruction of the parts, illustrates the great change which often takes place in the contour of the face from swelling and infiltration, which had distended and enlarged the lacerated coverings of the jaw to more than twice their natural size. The cheeks are enlarged, and have lost their symmetrical appearance from the destruction of the jaw at the symphysis, the swelling distending the soft parts, causing the fragments to separate, making the middle portion of the face much broader than natural, and giving it an expressionless aspect. The tongue was much swollen, and had fallen down between the extremities of the shattered jaw, and appeared to be resting upon the throat. It was completely uncontrollable by the patient except a slight motion upward and backward. The appearances in this case are the same as are seen in wounds received from rifle balls at short range.

The missile entered below the bicuspid teeth of the left side, completely destroying the bone up to the symphysis, and passed out upon the opposite side below the last incisor, leaving the canine and bicuspid with the part of the jaw containing them, denuded of integuments. This denuded portion was badly shivered, having fractures extending up the side and lower edge of the bone, and probably through the sockets of the molar teeth.

The fragments were removed, and the lacerated edges of the wound trimmed and drawn together with sutures. He was sent to the rear, and I never heard of the result. This case exhibits the condition and appearance of one of the most serious forms of injury these parts are exposed to from fire arms.

Another dangerous injury is where the ball passes in the same direction, but farther back, and in which both sides of the jaw are broken, but the destruction is not so great to the bone, which seems to suffer less the further back the ball enters. The damage done the soft parts is more severe, not in deformity, but in lesion to the muscles of the tongue, and the near proximity of the wound to the throat, for when inflammation sets in, it is very liable to cause strangulation by rendering the tongue uncontrollable, exciting spasmodic closure of the glottis, or obstructing respiration by edema of the pharynx. Again this part is frequently wounded by the ball striking the teeth and upper

part of the bone of one side, and passing downward toward the opposite side, striking, and carrying away the lower part of the jaw, causing at the same time fractures toward the symphysis, in many cases loosening and jarring a number of the teeth from their sockets, at a considerable distance from the immediate track of the ball. In two cases that I saw, the ball taking the same course, but entering at the lower edge of the bone of one side and passing diagonally upward, carrying away the teeth and upper margin of the jaw, on the opposite side, the destruction was not so extensive. The cause of this was probably the application of the force upon the exterior surface of the arch of the jaw upon the one side, and the teeth and soft alveoli on the other, which are not liable to fracture so extensive as the harder lower border in either entrance or exit. In other words the bone is struck, and traversed through the structures, and from the direction which will cause the least destruction.

When the ball passes perpendicularly from the teeth toward the lower border, as it frequently does, the injury is not apt to be so serious. The extending fractures will usually only separate fragments along the lower edge of the bone, a short distance beyond the course of the ball, yet sometimes detaching pieces extensive enough to expose the roots of the teeth, loosening them and destroying their nerves and bloodvessels. In this lesion, the splitting of the jaw in the line of the teeth is a frequent occurrence, and is one of the most serious injuries the bone can receive. This injury is also apt to be accompanied with a wound of the chest—for when it takes place the course of the ball is almost always in that direction. We saw a man wounded thus at Mission Ridge, who died from the chest complication, while the jaw was in a fair way to recover.

Balls striking the jaw and teeth in front and passing directly backward, are frequently fatal, from penetrating the spine or base of the skull. Yet cases some times occur, when the force is spent, that the ball lodges together, with the teeth and fragments of the jaw that are carried with it, in the soft structures of the throat. We have removed a tooth and a battered conical ball from the tonsil of a man, in which the pulsation of the carotid artery could be distinctly felt, and against which they appeared to lay in direct contact.

Cannon balls often carry away a great portion of this part of the face entire, soft part and bone, producing terrible mutilation; and fragments of shell cause scarcely less frightful injuries, from which the sufferer recovers with deformity, in proportion to the amount of bone lost.

The operations and course of treatment vary with each different class of cases, and in every separate case, yet there are special principles that should guide them in this locality, as in all others. First, the soft parts should receive special attention as to the removal of that portion of muscle or fascia that is liable to slough, and thereby rid the patient of the disgusting and depressing effect of this process, which, in most instances, causes the death of the sufferer, by inducing the diarrheal and typhoid conditions, that are notorious in these cases. All fragments of bone should be removed for the same reason, as the suppuration from degenerating bone is more offensive and dangerous than the slough of the soft parts. The suppuration from a clean granulating surface is not so disgusting, nor is it so depressing when swallowed with the saliva as that above mentioned, and we have observed patients with wounds of the mouth and throat complain but little of it, but when bone and other tissue were being thrown off, disgust and discontent were always present, and with them would always be a depression of vital power, which, if the causes were not removed, would ultimately fall into the typhoid or pyaemic condition. It is from this cause that a great portion of these cases are lost. There is often but little chance to procure such food as their peculiar condition requires, being unable to masticate or receive what would be proper sustenance, as in other wounds,—even when every thing is on hand and properly prepared, there will be an inability to swallow it in sufficient quantities—and when the small portion which is swallowed is intermingled with pus, and the lungs are at the same time inflated with air, fetid with the disagreeable odors of a decomposing and sloughing mass of tissue, the deleterious effect becomes overpowering. So often unsuccessful were these cases that I have met surgeons who classed them with the most fatal to be met with. We have observed the cases which progressed most successfully, were those in which the parts were so dressed and treated as to cause the pus to be removed and prevented it from being swallowed by the patient. By not giving this precaution sufficient attention at the commencement of the war, and closing the wound to overcome deformity, as the first operation and treatment indicated, many cases were lost, especially where the jaw was split through the course of the teeth and with fissures at the side and lower margin, injuries from which there is profuse suppuration. This profuse secretion the patient finds it difficult to eject from the mouth and throat from the pain it causes, and the often immovable and uncontrollable condition of the tongue and lip newly constructed from the lacerated margins of the wound. We did not at first remove a sufficient amount of the shattered extrem-

ities of the bone, being anxious to retain as much of the jaw as possible and classing it with the bones of the face, which the older military surgeons had taught, were remarkable for their recuperative power, and which is true, I think, only of the superior maxillary that with us often recovered from the severest injuries, while the inferior maxillary was equally notorious for failure from necrosis, whenever the continuity of the bone was broken and having fractures extending up the side of the bone and through the sockets of the teeth. The bone becomes very much infiltrated with blood in the spongy portion around the teeth, and where ever any cancillated structure is fractured into. The teeth are loosened, and the nerves and vessels which supply them are destroyed, and they act as foreign bodies. When inflammation sets in, the periosteum is very apt to separate from the bone, which perishes as far as the fractures extend, and the operation of nature to get rid of it commences by the sloughing process. If the soft parts are drawn closely over it the channels of escape for the pus will be more or less closed, and it will become intermixed with the saliva. The rule should be, when the jaw is much split and the teeth very loose, to remove the bone up to the firm teeth, or at least as far as there is excessive looseness, and the bone greatly shivered, for I believe by so doing, there will be saved more of the jaw, and the patient recover sooner than if left to struggle with necrosis and a secondary operation.

We had a case under our care at Atlanta, which will illustrate this part of the condition, and treatment of these cases; and its termination by an accident which will always cause more or less anxiety to the surgeon. He was a private of the Sixty-ninth Regiment O. V. I., wounded the last of August, 1864, at Jonesboro', Ga.; was 40 years of age, not a strong man, and unwell when wounded. The wound was inflicted by a conical ball, at about fifty yards distance, striking below the bicuspid teeth of the left side, and escaping at the opposite side, in the same locality, completely destroying the symphysis, and badly fracturing the bone in the direction of the ramus. From the right side there was a large fragment detached, composed of the whole of the outer side of the bone, from the point destroyed to the last molar. The soft parts presented a wound not unlike the one in the sketch.

It was thought by the surgeon who first dressed his wound at the field hospital, that he would survive but a few hours, and the wound was only supported by a simple bandage and a few adhesive straps. On examining the case when it came under my charge, I found the parts very much swollen, the tongue projecting between the extremities of the fractured jaw, and the patient weak and feeble:

Cold applications were applied, stimulants and beef-tea given freely, and every means taken to divert the pus from the throat. The inflammation subsided slowly though his strength did not improve much; he had but little relish for the limited variety of food offered him, and often suffered severely from paroxysms of coughing. After several days, I removed a number of spicula of bone that had loosened; after which, he began to improve in strength.

Upon further examination, I found several of the teeth, on both sides, loose, and removed them. By pursuing the investigation, found that a probe could be passed up a considerable distance, upon the bone denuded of periosteum, the dead portion extending up to the last tooth removed. On consultation, it was agreed to give him a few days more of rest and good diet, and then remove the dead fragments. He improved daily; and about two weeks after receiving the injury, we placed him under the influence of chloroform, and removed the dead portion of bone.

The patient improved rapidly, was cheerful, and gave every evidence of a speedy recovery. The cavity from which the bone had been removed being filled with new tissue, the edges of the wound were pared, drawn together, and secured by pin sutures, at the lower part of the wound, as was the upper part, including the lip,—taking the precaution to leave a large orifice in the central part of the chin, opposite the extremities of the bone, for the free escape of pus, deferring its closure for another operation when the discharge had ceased and the cavity occupied by the bone removed had become filled with new tissue.

About one week after, early one morning before reveille, his companions beside him, observed that he coughed and was seized with a paroxysm of choking, not more severe than usual, groaned a few times, and became quiet, as he had often done before. This did not excite any alarm, in them, or the nurse on duty; but, on his visiting that part of the ward a few minutes after, speaking to him and receiving no answer, on examination found that he was dead. A few hours after, I made an autopsy of the case, found the tongue in its natural position, but the glottis was closed, the trachea was free, the right side of the heart filled with blood, and the lungs appeared slightly congested. The liver and abdominal viscera were found in their normal condition. The jaw presented changes of great interest, over the whole surface of the bone, the periosteum was but slightly attached; the few remaining teeth were loose, but adherent to the socket; the cartilage upon the articulation was thin, rough, and had the appearance of being absorbed. Upon the surface of the bone, beneath the cartilage, was a large number of small

dark specks, the same that are so often met with upon the head of the femur, when that bone is suffering from similar injuries. The glenoid fossa was slightly changed, and had a few dark specks, visible beneath the cartilage; they were not so dark colored as those of the condyles.

The immediate cause of death in this case, may be attributed to spasmodic closure of the glottis, which again may have been caused by the tongue falling back into the throat, as the muscles which control and carry it forward had lost their attachments by the destruction of the jaw. Although the tongue was in its proper position when examined, it may have resumed it in removing the body from the ward.

The pathological condition of this case exhibits a state which should be prevented, if possible; and as it is one frequently found in bone, where great efforts have been made to throw off dead parts and repair the loss, it can only be accomplished by removing all the spicula and the irregular extremities of the jaw, including those teeth in which the lower extremity of fang is exposed, thereby relieving the uninjured portion of bone from the effect of the effort made to throw off necrosed parts, and preventing the bone from suffering the abnormal changes observed in this case. The periosteum should be retained if possible; yet it is not so necessary here as in most of the other bones, for its place is rapidly replaced by a firm rim of cartilage, as numerous instances have proven in civil practice, where a large portion or the whole bone has been removed. No anxiety should be felt at leaving the wound open, however large it should be; for, by paring the edges, the sides of the wound may be approximated, any time after the sloughing has ceased, and the cavity partially refilled with new tissue. This locality is very fortunate in its situation to obtain tissue from adjoining parts, to fill up spaces from which the original covering has been lost or removed; and by the aid of artificial teeth, it is wonderful what deformity can be overcome.

In cases in which the ball has divided the bone, by passing through it from above downward, or the reverse, the same rule should be followed. Yet it is not often that much will have to be removed from the shattered extremities of the bone, except in those cases in which the obliquity of the course of the ball renders the fracture more extensive and irregular. The complication most to be feared in these cases, is the splitting of the bone in the line of the teeth, and their being much disturbed, in such cases, extensive necrosis is liable to occur. If the fractured parts are not removed at first, because a hope is entertained the destruction is not extensive enough to produce such an effect, the removal should take place as soon as it is found that necrosis has occurred.

The fragments can be best kept in place by adhesive straps and bandages, assisted by compresses, as the case may require, substituting the upper jaw as the principal support to retain them in their proper and natural position. No two cases can be treated by the same arrangement, but the surgeon must adapt means to overcome, in each case, the difficulties which each peculiar fracture may present. Gutta-percha, or felt, may be adapted to the parts, to retain them in position, and sometimes plates fitted by the dentist, may be of great service, when access can be had to such aid. As to the wire or thread around the teeth, to hold the fractured parts together, there is some doubt, unless there is the best evidence that there is no extending fracture in the line of the teeth, for the pressure this will bring to bear upon the parts from motion, and often, from the swelling of the soft parts about the wound, will cause the fissure to be opened, and allow the blood and secretion to infiltrate into the cancellated structure, beside the roots of the teeth, causing them to loosen and the bone to necrose. When wire is used, it should be passed between and around the teeth, at a considerable distance from the broken extremities, so as not to cause any pressure laterally upon those that may be partially loosened next the fracture. We must guard against the pressure against the teeth being transferred to the inner plate of the jaw, causing the fragments of the inner side of the bone to be drawn inward, separating it from the outer one, thus opening the fissure through the alveoli. In holding the soft parts in contact, nothing accomplishes it so well as the pin suture; and after the blood has ceased oozing, a little collodion applied to them, extending slightly beyond them upon the skin, so that when the pins are removed, the thread will remain where it will act for several days, as a firm support for the parts.

ART. II.—*Papers on the Surgical Diseases and Surgery of Children.* By M. P. GUERSANT, Chirurgeon honoraire de l' Hôpital des Enfants Malades; Membre honoraire de la Societé de Chirurgie, etc., etc. Translated from the French by J. C. REEVE, M. D., Dayton, Ohio.

V. FOREIGN BODIES IN THE AIR-PASSAGES.

Foreign bodies in the air-passages may come from within or without the body, and are met with in the larynx, the trachea, or the bronchial tubes. Children are especially liable to this accident. The substances are of different character and the cases tolerably frequent, as Louis has shown in the *Memoirs of the Academy of Surgery.*

Among the foreign bodies which may be found in the air-passages coming from the interior of the body, are worms, which, ascending the œsophagus may pass into the larynx and cause sudden death; also, pus proceeding from an abscess of the neck, or again, tubercular matter developed in a ganglion or in the lungs may lodge in the larynx. There are also substances belonging to this class which came originally from without the body; thus, in cases of wound of the chest, pieces of dressing, as charpie or lint, pass sometimes into the lungs and reach the respiratory passages; portions of necrosed bone may penetrate the pulmonary tissue and be expelled by the trachea. Even a ball may follow the same route after a wound of the thorax. All these foreign bodies have often been observed without causing any symptoms to indicate their presence; however, for the abscesses of the neck which have opened into the trachea, for the retro-pharyngeal abscesses which threaten to burst into the trachea, and for the foreign bodies coming from a wound of the chest, there are signs leading to a correct diagnosis. We must say, however, that these cases often terminate without having been suspected, and many observations of this kind are to be found in authors.

But this is not the case with foreign bodies proceeding from without; they are introduced directly by the mouth and are very various in character—liquid, soluble, soft or solid.

The liquids are water, wine, spirits—all the drinks.

The soluble matters are sugar, pieces of gum, sugar-plums, pieces of candy, pills, etc.

The soft articles are pieces of food, more or less masticated.

Among the solids are beans, nuts, pearls, teeth, several teeth together in one piece, bone, fish bones, coins, button-molds, etc.

Symptoms.—The foreign body may be in the trachea or in the larynx, and it causes symptoms more or less severe in proportion to the youth of the patient and the greater or less capacity of the air channels.

If the foreign body is a liquid, it causes great irritation, a convulsive and suffocating cough, strangling and *râles*, which disappear rapidly with the expulsion of the liquid.

If the substance is soft or soluble, it causes nearly the same symptoms. Immediately after the accident there may be so much suffocation that the patient perishes immediately; but more generally there is violent and convulsive cough, with a menace of suffocation appreciated by the physician and by the patient, the voice is hoarse or extinguished, there is a sense of anxiety and danger on the part of the sufferer, pain in the tract of the respiratory passages, sometimes definitely localized, sometimes more vague and diffused.

If the intruding body is solid, these symptoms persist and even increase in ntensity, but they vary according to the consistence of the substance; those which are soluble cause symptoms of but slight duration; they dissolve, diminish in volume and are expelled by coughing. A piece of sugar, for instance, a morsel of gum, or a pill, in dissolving diminish in volume and are thrown out by the efforts of the patient either entire or in pieces.

The same result may follow, but more slowly, with pieces of food and the

soft substances in general; we have seen a child throw off pieces of meat for several days in succession and thus free itself by paroxysms of coughing, and also a child who had crunched a sugar almond the pieces of which had entered the larynx and trachea.

But it is not the same with foreign bodies which are solid; the symptoms detailed persist and others are developed. A pin or a fish bone may be fixed in the larynx and occasion an intense inflammation. Bodies of this nature remain fixed at one point; solid and round bodies tend to change place, and it is such bodies which pass from the larynx into the trachea, or descend into the bronchiæ, or they may remain in the ventricles of the larynx when they are small. It is in cases of this class that we see the foreign substance move about, becoming displaced and giving rise to those intermissions in the symptoms which cause the friends of the patient to doubt the presence of any foreign body, because to the most frightful cough and symptoms of suffocation a perfect calm succeeds.

When these foreign bodies are in the larynx the symptoms vary less because they do not become displaced, but when they are in the trachea they may rise and descend; then upon placing the hand in front of the neck a sensation of the moving body is perceived; sometimes they descend into the bronchiæ and do not move. Upon one occasion we diagnosticated the presence of a bean in the left bronchia of a child; the respiratory murmur could only be heard in the right lung and there was entire absence of it in the left. We should, then, in these cases, observe the respiration carefully.

If foreign bodies in the larynx or in the trachea be abandoned to themselves, although the liquids and soft substances are expelled by the natural efforts, it is not the same with the hard bodies, which remain always of the same size, or which increase in volume, as beans for example. In these cases the symptoms augment in intensity and the attacks of suffocation are repeated: sometimes we see the patient agitated by convulsive movements, the face becoming dark blue in color, the eyes watering and the veins of the neck swollen; the patients make extremely violent efforts of expulsion, and under these circumstance an accumulation of air takes place in the lungs which distends their parenchymæ, in consequence of rupture it penetrates the cellular tissue above the clavicles and in the chest, then there exists a pneumo-thorax and death may slowly follow, but, other things being equal, sooner with children than with adults, on account of the lesser dimensions of the organs.

The *diagnosis*, by the aid of the means indicated, is often tolerably easy; nevertheless we can not dwell too much upon all the symptoms detailed. We should also attach the greatest importance to the information derived from the persons who were with the child at the time of the accident and observed the first symptoms, which are sometimes followed by the expulsion of the obtruding body; then the accidents which persist may be temporized with. It is very important not to confound the introduction of a foreign body into the pharynx with one in the larynx. Ordinarily, in the case of a foreign body in the larynx, the pharynx and the œsophagus are permeable for drinks, which they are not if it occupies these cavities.

Prognosis.—The gravity of cases of foreign bodies in the air-passages varies according to—

1. *The age of the child.*—Very young children, of one year for instance, experience far more violent symptoms on account of the smallness of caliber of the larynx and trachea.

2. *The state of health of the patient.*—Ill health is, of course, of bad influence in such cases.

3. *The consistence of the foreign body.*—Liquids cause symptoms only of temporary duration; soluble substances are less dangerous than soft solids, and hard bodies, producing permanent symptoms, are all more or less serious. Those having a smooth surface are not so dangerous as those which are pointed or rough.

4. *The volume of the foreign body.*—It may by its size intercept more or less completely the access of air and threaten immediate asphyxia.

5. *The duration of its sojourn.*—Inflammatory complications are to be feared when the foreign body has been long in the passages, while they are prevented by early removal.

We know, however, that foreign bodies have remained in the air-passages months, and even years, and have been finally expelled by the natural efforts.

Treatment.—Being called to a patient having a foreign body in the larynx, examine him if you can with the laryngoscope, or the speculum of Dr. Labordette; if it is at the entrance of the larynx or even between the vocal cords, you can positively, by the aid of this latter instrument, see and seize it with the polypus forceps. If we are deprived of this means, which seems indispensable in such cases, we should first of all place the child with the head downward and strike on its back, making it cough and cry. By this means we have seen foreign bodies expelled, beans, pieces of money, etc.

After this procedure we may resort to emetics and sternutatories, but without much hope of success; and finally, most frequently without delay, proceed to laryngotomy if we believe that the foreign body is in the larynx, or to tracheotomy if in the trachea or bronchiæ.

In performing these operations we follow the course indicated when speaking of tracheotomy for croup; the cranes-bill forceps is a valuable instrument in these cases with which to seek the foreign body, which may be engaged in one of the bronchia; in a case of this kind we were fortunate enough to succeed with this instrument, foreign bodies not escaping from the bronchia with the facility they do from the trachea. We can decide for tracheotomy the more promptly that we do not have to fear failure as when we operate for croup, where success is rare; in truth, tracheotomy for foreign bodies is seldom fatal; death is the exception and a cure the ordinary result.

We have had occasion to operate five times for the extraction of beans from the trachea; four patients were cured and one died; the latter was operated on eighteen hours after the accident and succumbed to a pneumonia.

We have always applied simple dressings during the first day, and have only drawn the wound together gradually; we can seek to obtain immediate union when the foreign body has been removed, and not close the wound,

even to retain it open by a canula, when it has not escaped, and when we hope that it may yet do so.

After these operations the surgeon should be on his guard against bronchitis and pneumonia; he should examine the chest every day and act promptly upon the first appearance of symptoms of these diseases.

Is the Negro subject to Harelip?

We have received the following answer to the above question:

Catlettsburg, Ky., June 18, 1866.

Dear Sir:—In the June number of your excellent *Journal of Medicine*, I noticed the article in regard to "Harelip in the Negro," and the great disparity there seems to exist between the races.

Fortunately I have a case under my immediate supervision—a beautiful instance of this deformity in the colored race, and if the report of the case can in any manner conduce to the knowledge of the profession, I cheerfully give it.

Susan Page, aged 36 years, a perfect type of the African race, has a wide fissure to the left of the mesial line—extending to a slight degree to the upper jaw, but not involving the palate. Says her brother has a like malformation but to a slighter degree. She also reports having seen a mulatto girl with like deformity.

My attention being directed in that channel, I made inquiry of my medical brethren, also a resident dentist of this place, and none report having met any case, except the dentist, who informs me that two (2) well marked cases have come under his immediate observation.

Respectfully your ob't servant,

M. S. PIXLEY, M.D.

Malpractice.—We extract the following sound views from a charge of a French judge, recently delivered in a trial for malpractice:

"Providing a surgeon acts according to the rules of his art, he incurs no responsibility, whatever may be the result of his operation; and that even if it may be asserted that such operation, executed more skillfully, might prove more advantagous, or less mischievous to the patient. Pushing medical responsibility beyond certain limits, would be only to deprive patients of the succor of art precisely at the moment when they have the most urgent need of it. For, when a serious accident, calling for immediate aid, occurred, no surgeon would venture to operate upon the patient, in the fear that if, in spite of his efforts, the results proved unfortunate, he might be himself accused of having occasioned them, and no one would act without a consultation, giving rise to the loss of precious time and the production of irreparable mischief."

OBSTETRICS, DISEASES OF WOMEN, MATERIA MEDICA, AND THERAPEUTICS.

By THEOPHILUS PARVIN, M. D., Professor of Materia Medica and Therapeutics, Medical College of Ohio, and Clinical Lecturer on Diseases of Women at St. John's Hospital.

ART. I.—*Psychical Amenorrhea.*

Most physicians have met with instances of sudden arrest of the menstrual flow, resulting from mental impressions. Dr. Churchill, *Diseases of Women*, makes the following statement: "Almost all women who are sent up to the Richmond penitentiary (near this city), after being at the Recorder's court, labor under suppression of the menses, in consequence of the mental agitation and distress they have undergone."

It has sometimes seemed to us that the amenorrhea, from which girls at boarding schools—we will not say these are even occasionally penitentiaries, the convicts being condemned to hard labor during the varying periods of imprisonment—so often suffer, might frequently claim a mental rather than a physical origin.

Physicians too, are not unfrequently called to see childless married women, especially such as marry rather late in life, we believe, who are very desirous of becoming mothers, and in whom amenorrhea occurs without other obvious physical derangement. All these varieties of amenorrhea may be termed *psychical.*

A recent communication, found in the *Arch. génér de médecine*, from the eminent Raciborski, entitled, *amenorrhea from psychical causes, and particularly from the excessive fear of being pregnant, or from the strong desire of having children*, is quite worthy of professional attention. We think we can not do our readers a better service than in translating at least a part of this article.—[T. P.]

The form of amenorrhea which we wish to point out to the attention of practitioners has never yet been described by authors; but we do not doubt that when attention is once fixed upon it, examples will be met with quite often.

Amenorrhea, from psychical causes seems to us a true pathological state, having its individuality which it is important to know how to

distinguish from other species of amenorrhea as much in the interest of science as in that of therapeutics. Often there is nothing to be done but to dissipate the terrible mental anxieties, to which the patients much prefer physical sufferings. Besides it is not alone in women that the vivid pre-occupations of the mind sometimes re-act in a reflex manner upon the ramifications of the *grand organic motor*, the great sympathetic, and extend their influence to the organic life of the reproductive apparatus. Man also presents examples of it, and they are more readily appreciated.

One has often seen vigorous men become, for the time being, impotent, as a consequence of an unfortunate anticipation based upon a simple imaginary fear, etc., etc. In this case the more efforts are increased, the more imagination increases the fear of not succeeding, and the more certain of seeing prolonged this moral *anaphrodisia*, born under the influence of an erroneous idea, transmitted by the sympathetic nerve from the brain to the sexual organs.

(Raciborski here quotes from Montaigne, who "in speaking of the power of imagination recounts a fact quite curious of this sort, giving almost to understand that a similar thing had happened to himself." But we take for granted that doctors who read at all, have read Montaigne—they ought to read him, if for nothing else, to know his judgment of them and of medicines, *Fas est ab hoste doceri*—and, therefore, we omit the extract: we also omit some remarks immediately connected with it).

Facts of this kind, because of the facility with which they can be observed in organs situated exteriorly, every one knows. We may well believe that in certain circumstances, this theory moreover is founded upon the very conclusive experiments of M. Cl. Bernard, and it is with no little satisfaction that we seek to apply recent physiological progress to medical observation; we have found it the explanation of several interesting facts which have for a long time impressed us, and of which we have not been able to render a satisfactory explanation.

It would be easy to relate a great number of observations of this kind, but this would be to extend the tableau of human weaknesses unnecessarily and without any benefit to science. (The author present but two cases, only one of which we think it worth while to record here. Immediately prior to their presentation, he answers a possible objection to the minuteness of the details that are given, thus: We should bear in mind that in order to appreciate the influence of *psychical* causes, it is necessary to portray as faithfully as possible the state of mind of the patients; hence the necessity of entering into

certain details of the life which can enable one better to judge the influences of their anticipations (pre-occupations).

Madame X——, aged thirty years, ordinarily in very good health, menstruating quite regularly, the climate of Africa, where she had accompanied her husband, not agreeing with her, returned very soon to France, and lived in Paris with her children, to whom we frequently gave our professional attention, having previously attended the mother in two confinements. One day we were requested to visit Madame X——, being informed that she had been indisposed for some days. We found her lying down; skin rather warm; pulse ninety; expression changed; eyes brilliant; much agitated, without complaining of any special suffering. As it was impossible to connect these symptoms with any local lesion, we asked the patient some questions in reference to her menstrual periods; but we saw immediately that this only increased her agitation; in place of a direct response she only said with an accent of despair, "Do not speak to me of it—that is precisely that which makes me miserable." Nothing more was necessary to enable me to infer the cause of her indisposition. She added then that she had always been "regular," with the greatest exactitude, but that this time there was eight days delay; this made her despair, for she feared she had become pregnant, as once since the last menstrual epoch she had failed in her duties. This avowal astonished us, for Madame X—— appeared very much attached to her husband, and although young and quite pretty, seemed to conduct herself very properly under the guardianship of her mother. She told us that during her recent voyage from Africa, she made the acquaintance of a sailor, who, being enamored with her, had solicited and obtained permission to correspond with her. This state of things had continued for several months, when the young officer having received orders to go with his ship on a distant expedition, fearing that he would not see her again came to Paris to make his adieus. An appointment was requested and granted; and it was there the poor woman told us she had succumbed, contending to the last, at least physically, if not morally. Since then, there was nothing for her but tears and anxious anticipations; the fear of pregnancy constantly possessed her, and this fear was changed into despair when menstruation did not occur at the accustomed time.

Our first care was to endeavor to relieve the patient of her mental anxiety, and it is thus that it is necessary to commence in similar cases. The attentive consideration of all the details of the confession of this poor woman, strengthened by experience, made us infer that she was not pregnant, but that menstruation was delayed from a *psychical* cause.

We told her that examples of similar delays were rather frequent, resulting from intense mental *pre-occupation*, and that there was little probability that pregnancy was the cause in her case. Immediately the countenance of the patient assumed another aspect.

To moral treatment we added mild narcotics, conjoined with some gentle excitants, such as: mustard foot-baths, infusion of linden with fifteen drops of acetate of ammonia, etc., etc. Two days subsequently the menses returned, relieving all the anxieties of the patient, and they continued the usual time. Seeing her some days afterward she declared that no one could represent the happiness she experienced when we had reassured her, admitting the difficulty of pregnancy, and she had promised she would never again expose herself to similar danger.

[The second case we omit in our translation].

With a little experience it will not be very difficult to distinguish this kind of amenorrhea from commencing pregnancy. Its dominant character is an excessive fear of being pregnant, determined by the social position of the parties, or by considerations of family. Here women know perfectly the danger before exposing themselves to it, and if they do yield, it is not until after a vigorous struggle between this sentiment of fear which always rules them, and another sentiment which has become strong enough to disarm them. But from the moment this fear is made justifiable by acts, it assumes exaggerated proportions; we find its expression every where—in the patient's acts, in her eyes, in her words. We see nothing similar in commencing pregnancy as it occurs in women who have not these mental *pre-occupations*.

Besides, in married women who resolutely conform to their destiny, a delay (in menstruation) is not ordinarily accompanied by a feeling of fear, and still less do we see them abandon themselves to despair: every thing is calm and natural. If the physician is consulted in this case it is only to know what may be relied upon, but never from the need of being reassured.

It is the same in unmarried women whose position does not require so much precaution. If then sexual intercourse some times occasions regrets, it is ordinarily not until later, when there is no doubt as to the existence of pregnancy; but the dread of becoming pregnant so little influences the mind, that there is no fear in exposing herself anew—in the amenorrhea from psychical cause, on the contrary, the subject has exposed herself but once.

The treatment which appears to us to succeed best in psychical amenorrhea of this species, consists, in the first place, in moral means, tending to tranquilize and calm the inquietude of the patient. We add to this

some gentle excitants of the circulatory system, such as warm infusions of linden, of elder, of the leaves of the black currant, etc., etc. It is in this species of amenorrhea, that we obtain especially excellent effects from apiol, administered in the form of capsules, one or two a day. We often add to these a few grammes of the muriate or of the acetate of ammonia, given in the infusion just mentioned. It can not be objected that these means would have an injurious result, if, instead of a simple delay in menstruation, there were really pregnancy. Undoubtedly we are far from thinking that one may never make an error in diagnosis; but always in this case even, we may be at rest in regard to the consequences. We generally too much exaggerate the abortive properties of medicinal substances, and we should not attach much importance to the slight stimulants just enumerated. The amenorrhea which is the natural consequence of conception resists very differently from this, all the drugs regarded as having a special action upon the uterus. It is rare that enceinte women, who do not fear resorting to crime in order to conceal their condition, have not had recourse successively to many of the reputed *abortives*, before applying to a physician. All practitioners who have learned the truth from these unhappy ones (for at first they generally seek to deceive the physician in order yet to obtain some thing that will restore the catemenia), know well that the greater part of the efforts of this sort are useless in a true pregnancy. We even think that most of the evil fame which certain substances, especially in the country, possess, in this relation, is due to the fact that they have been used in psychical amenorrhea, caused by the fear of being pregnant, mistaken for commencing pregnancy, and that a simple return of the delayed menstrual hemorrhage was wrongly considered an abortion.

ART. II.—*A Plea for Regularity and Unity in Prescribing Medicines.* By JAMES F. HIBBERD, M. D., Richmond, Ind. (Read before the Wayne County (Ind.) Medical Society, July 5, 1866).

"It is an opinion, not infrequent among medical men, that the multiplication of medicines in our hands adds in the same ratio to the power and facilities of practice. This view is admissible only in a very qualified sense. It is, in truth, as correct to say, that the addition of new medicines or preparations, which do not expressly accomplish new purposes, or fulfill more advantageously those already attained, becomes an incumbrance to the practitioner, and an impediment to the progress of the science." (Holland, Notes and Reflections).

This proposition I hold to be true,—that in therapeutics the physician is

distinguished from the charlatan by the fact that the former, having by his skilled examination come to a rational determination of the character of the malady he is called to treat, prescribes drugs (if need be) the nature and power of which he understands, while the latter, having taken the declaration of his patient as to the character of the disease, or guessed at it for himself, administers drugs the nature and power of which he neither understands nor seeks to learn.

Sufficient testimony exists to show that many otherwise excellent practitioners of medicine are governed by very lax rules in the selection of medicines in the management of their cases. In some, this is possibly ignorance, in more it is carelessness, and in most it undoubtedly arises from a habit of seeking notoriety by having a special individuality in therapeutics.

Some months since in reading a detailed account of the management of a case of double ovariotomy performed in the autumn of 1863 by one of the most distinguished medical men in the United States, I noted that he used McMunn's elixir of opium for an anodyne almost exclusively, and for several days large quantities of it were administered.

My thought at the time was, that it was quite a misfortune that a leading practitioner in the successful treatment of a very interesting case, in a department of surgery attracting marked attention from the younger members of the profession, should make the exhibition of a nostrum so prominent a feature of the management. I can readily believe that some persons would fancy that that particular form of anodyne was especially valuable in the after treatment of ovariotomy, and would make it a point to procure the "elixir" should they be called to take charge of a case. Thus would the use of the nostrum be extended, and the pernicious habit of prescribing remedies of unknown preparation be more firmly fixed.

Perhaps the surgeon in this case might be excused for prescribing a nostrum if there were no suitable officinal medicine. But the United States Pharmacopeia contains twelve preparations of opium and four of morphia, and the British Pharmacopeia adds several more. Certainly among all these, some one, or some combination of two or more, could be found that would answer all the ends accomplished by McMunn's Elixir. At least I could name other surgeons who succeed as well as Prof. Peaslee, in ovariotomy, and who use for anodynes only the officinal preparations of opium.

My attention has recently been turned to this subject afresh by reading some judicious observations in the June No. of the Cincinnati *Journal of Medicine* entitled, "For or Against the U. S. Pharmacopeia," wherein the editor notices the descriptive catalogue of Fluid and Solid Extracts prepared by Thayer & Co. He gives Thayer & Co. credit for skill and integrity in the production of their extracts and other preparations, but very properly condemns the use of extra-officinal medicines by physicians while preparations of the same drugs, made according to the formula of the U. S. Pharmacopeia, and equally efficacious, and accessible, being kept in every respectable drug store.

If we measure respectablity in druggists by the rule cited above, I fear

we shall not find a respectable gentleman of that profession in this city. The Pharmacopeia directs the preparation of twenty-five fluid extracts, but I doubt that there is an ounce of any one of them in the city, and yet every apothecary has a full line of fluid extracts, and will fill any prescription presented, containing one or more of them as an ingredient; albeit, no two establishments may have the same preparation, one using Thayer's, another Tilden's, a third Merrill's, etc., etc.*

Some of these manufacturers, perhaps all, assert that they make their fluid extracts of the same strength as the officinal; possibly this is true, but nevertheless, they are but private preparations, are especially presented as such, and for that reason should be discarded by all physicians while there is an officinal preparation of the kind.

For the sake of uniformity, and for the convenience alike of physician and apothecary, the U. S. Pharmacopeia is prepared and published by competent authority, furnishing a descriptive catalogue of Materia Medica approved by the profession, and giving specific directions for the manufacture of all pharmaceutic preparations deemed worthy of attention.

The primary list of the Materia Medica of the Pharmacopeia embraces over three hundred drugs—the secondary list about seventy-five drugs, and the preparations number about five hundred, making an aggregate of nearly nine hundred officinal articles, intended to be of uniform character and strength, and are so, as nearly as it is possible to get them.

Can there be any doubt that this catalogue of officinal medicines affords all that we need, in this direction, for our daily warfare with the ills that flesh is heir to? Certainly not. And because they are officinal—kept in the shop—being selected by a uniform standard, and prepared by a constant formula, we should prescribe them and no other, so long as they answer our ends. I would not debar a physician from the use of a non-officinal medicine when adequate evidence is presented to establish a superiority to any officinal one used for the like purpose; but when a physician, through ignorance of the value of officinal medicines, or for the indulgence of a proclivity for new fangled things, persistently prescribes non-officinal preparations of equal or less value than officinal ones, he ought to be deemed guilty of a professional misdemeanor. And if the non-officinal medicine prescribed is one of that large class that some manufacturing druggists send out to the world and refuse to make public their ingredients, or the method of preparation, the physician should be held to discipline for infraction of the Code of Ethics.

All respectable physicians are presumed to understand the character, the nature and the therapeutic value of officinal medicines; and all respectable druggists are expected to have them in their shops, and understand how to prepare and dispense them. This knowledge is taught in text-books and inculcated in lectures, and its acquirement is a part of the necessary educa-

*Since writing this paragraph Messrs. Plummer & Kelly have prepared offi. Fl. Extracts.

tion to entitle a student to a diploma, *and it is all that is required in this behalf.* The candidate for graduation in a medical school must have full knowledge of the compound powder of ipecacuanha, but no question is asked him about McMunn's elixir of opium; he must be posted in relation to the composition and virtues of citrate of iron and quinia, but he needs not to have heard of Nichols' iron and bark. In short, being trained to the knowledge of officinal medicines, the physician should punctiliously confine himself to their use while they will fulfill all his wants, and wherein they fail, only should he cautiously adopt a non-officinal article of known composition; and at all times he should eschew preparations, any ingredients of which is concealed, or where the method of compounding it is kept secret, with the same sensitiveness that he would avoid a consultation with a graduate of an irregular school.

While we confine ourselves to officinal medicines we shall have order, conciseness, safety; whenever we needlessly supplant them, we shall have confusion, complexity, and danger. "If we have not enough therapeutical agents recognized by our Pharmacopeia, let it be enlarged; or, if any of the modes of preparation are faulty, let them be improved. But while we have that Pharmacopeia, let us adhere to it as a rule, prescribing such remedies only as are officinal and in their officinal forms." (*Cin. Jour. of Med.*).

This is the cord that binds us in a common therapeutic fraternity, wherein the advance in knowledge of any one may easily be made understandable to all, and can readily become of practical usefulness: sever this cord, and we roam as individuals over the vast domain of unexplored remedial agents, each following the bent of his own inclination, having no common standard for mutual comparison, and no central garner where our accumulated experience may be gathered for either present or future benefit.

If these rules were closely observed our medical literature would be much less marred by lax and latitudinous therapeutics; the advertising pages of our medical journals would not teem with the presentation of compound medicines of unknown ingredients and preparation; nor would the traveling agents of manufacturing pharmaceutists find favor for these non-officinal irregular medicines, either with country physicians who furnish their own medicines, or the apothecaries who dispense the prescriptions of city practitioners.

There is a fashion in this affair; and many of us, I opine, have no more substantial foundation for prescribing these preparations than that it is, for the time, professionably fashionable to do so.

One year we run upon "Compound Extract of Stillingia;" another upon "Chemical Food;" a third upon the "Hypophosphites;" a fourth upon "Iron and Bark;" and just now an active effort is being made to introduce into this city another nostrum called "Fluid Extract of Sarsaparilla with Iodide of Lime." This last article may be an excellent remedial agent, but it is presented surrounded by the declaration that large numbers of the most eminent physicians have testified to its worth; by the promise that it is admirably adapted to the use of children in chronic diseases, and by all those

special pleadings that nostrum makers know so well how to apply to cajole the public into buying their wares.

This Iodide of Lime is one of the products of the laboratory of J. R. Nichols & Co., who have a very specious and Oily Gammon way of presenting their preparations to the profession. For some years this house has been making and vending an "Elixir of Bark and Iron," the great merit of which they claimed, was, that it contained the protoxide of iron, whereas it contains no such ingredient. Of this fact I have long been satisfied, but to fix the affair with chemical certainty, Dr. Weist, at my request, during the present week, examined a specimen that I presented him, and neither by the test paraded by the proprietors, nor by other tests could any protoxide of iron be detected.*

Within the last forty-eight hours, while I was preparing this paper, the traveling agent of this same house laid upon my table a circular, one side of which is devoted to puffing the iodide of lime, and the other side is taken up with an essay on "Opium and its Alkaloids," leading to the announcement that the Tinctura Opii Deodorata of the Pharmacopeia is an excellent preparation, but that its title is a misnomer, and that they prepare the article in a superior manner, and *propose to vend it under the name of "Infusum Opii Deodorata."* Such brazen impudence is past being tolerable, and ought to rule the house of its perpetrators from the catalogue of reputable pharmaceutists,—and prevent any of their preparations from being found in any respectable drug store.

In conclusion, I beg to present my conviction that only by keeping within the limits of officinal medicines, in our prescriptions, can we establish the beauty of simplicity in therapeutics; maintain unity and purity in this department of medical science; render our joint experience of practical utility; be of mutual assistance and support in cases of emergency or doubt and uncertainty; and successfully guard our honorable profession from being debased and demoralized by the encroachments of unenlightened empiricism, which, if not resisted, will arrest all future progress and destroy all present usefulness.

As a test of the sentiment, in this behalf, of the gentlemen present, I propose for adoption the following:

Resolved, By the Wayne County (Ind.) Medical Society, that it is the sense of the members here assembled, that physicians should feel themselves under a positive obligation to their own reputations, to the unity and usefulness of the profession, and to the common welfare, when prescribing drugs for their patients, to select from the articles and preparations presented in the U. S. Pharmacopeia, when that authority contains such as will meet their wants.

After deliberation the resolution was unanimously adopted.

*Dr. Hibberd has written a letter, received since his paper was presented, wherein he states that Dr. Weist has carefully examined a number of specimens of the preparation, and finds them to contain a proto-salt and a sesqui-salt of iron in varying quantities, the quantity of the one or the other salt probably depending upon the age and exposure of the particular specimen examined.

ART. III.—*Bromide of Potassium in Epilepsy.* Translated by F. B. NORSINGER, M. D., Indianapolis, Ind., from Annuaire de Therapeutique par A. Bouchardat.

At the present time the bromide of potassium is extensively used. I have already spoken of its application in epilepsy. Here is a case published by M. J. Besnier, which, I think, should be reproduced, *verbatim.*

"Eugene M——, a tradesman, forty years of age, fell, stricken for the first time with an attack of epilepsy, about six years ago when he was promenading upon the Boulevards. Of a sanguine temperament, and a robust constitution, he had never, up to that time, been seriously ill. About eight years ago, on account of family troubles, he had separated from his wife, and from this period notable changes were manifested. From great natural activity, and a gay disposition, he became indifferent to his affairs—sad and melancholy, oppressed with a profound ennui which his parents and friends were not able to dissipate. It was after two years of this state of dejection that the first attack of epilepsy occurred; six months after he had a second attack, which was followed by many others at from a month and a half to two months interval. He was then put under the treatment of asafoetida, extract of valerian, and the valerinate of ammonia. The attacks were scarcely affected. Later he took Agen's remedy (*cetoine doree*), and he remained three months without a paroxysm; but at the end of this time they reappeared, and resumed their ordinary frequency. He was put again upon the extract of valerian, with a little camphor, the hydrocyanate of iron, but obtained no relief. A more vigorous treatment was then instituted; he had now been sick three years and a half. He was given, successively and in gradually increasing doses, the lactate of zinc, the lactate of magnesia, and the ammonical sulphate of copper. These medicaments produced very little effect upon the disease; in the mean time the interval between attacks were some times prolonged three or four months. But this amelioration was transient. Since that he continued the treatment during seventeen months. At the end of this time he was compelled to give it up, his digestive functions being profoundly disordered to such an extent that he could not tolerate even a little broth. Seeing the attacks becoming more and more frequent, and more intense, he took for several months Mr. Tain's remedy (Galium album.) which remained completely inert. From this moment, and ever since, the attacks returned every five or six days. Each attack was generally preceded by a general *malaise*, very marked. Very often he experienced a sensation of intense cold about the knees, which he could not warm up. The *malaise* increased when the paroxysm was upon the point of breaking forth, and fearing then the violence of the convulsions with which he was menaced, the patient threw himself hastily upon his bed, fixed his arms and legs, and awaited the convulsive crisis. Some times he was disappointed, and the *malaise* gradually disappeared; more often the paroxysms broke forth with extreme violence, to such an extent that it was almost impossible to hold

him, notwithstanding the precautions he had taken. Often he did not have time to take these precautionary steps, and twice he fell, injuring himself seriously. These crises were accompanied by an initial cry, frothing at the mouth, and biting of the tongue. They were repeated two or three times the same day at an interval of three or four hours. They were often followed by a violent delirium during which the patient vociferated furiously against those who approached him. This delirium lasted from five to twenty minutes; at the end of this time a deep sleep announced the end of the paroxysm. At the same time that the paroxysms became most frequent, the intellectual functions of the patient were more and more altered. His memory became almost obliterated, he was incapable of the least work, and despairing at seeing his malady resist all the means which had been employed, he had fallen into a state of most profound moral dejection. It was two days after one of these ordinary attacks that he was put, by M. Bazine, on the bromide of potassium, the progressive dose after the method which we indicate below. This treatment immediately brought a complete cessation of the attacks; he has now been under treatment five months and a half. Little by little all his functions have been re-established, and he is really in a most satisfactory condition. His digestive functions are very good, and notwithstanding, he has been taking all the time, the bromide of potassium, in a dose of from four to six grammes (from ʒi to ʒiss.), he has never had either gastralgia nor diarrhea. His pulse is rather frequent than slow, from 70 to 80; there is neither an exaggeration nor diminution of sweat; the urine is normal. The cutaneous sensibility is intact, that of the back part of the throat, and the conjunctiva is slightly enfeebled. In regard to his sexual feelings, he says he experiences a notable calm, but he still has frequent erections. In the evening, before bed time he often has a slight tendency to sleep, but this is easily dissipated if he takes a little exercise. At times, he also has a little stiffness and soreness in the small of the back and in his limbs. His intellectual functions are very notably ameliorated; he gives a complete account of his condition; his memory has returned almost as good as it was before, though he occasionally hesitates for words with which to express himself. He experiences still, from time time, very irregularly, slight instantaneous roaring of the ears, some times a light trembling of the eyelids, trivial matters to which he attaches little importance.

The efficacy of bromide of potassium in this case is manifest. But can we regard the case as completely cured? The irregularities, which he still experiences, although they may be slight, and above all the short time which has elapsed since the cessation of the attacks, leave some room for doubt. In the mean time he is kept upon the bromide in sufficiently large doses, and is required to report every eight days how he is getting along.

Upon three other cases, and these are the only ones he has had occasion to observe, since he began the use of the bromide of potassium in this disease, M. Bazin has obtained a result equally flattering. In these three cases which are drawn from his private practice, the disease had resisted all other treatment. With one of the patients, aged 31 years, the convulsive

attacks have lasted for six years. They occur principally at night, and recur three or four times a month. More, he has from time to time slight vertigo, and lately he has three or four "absences" (wandering of the mind) characterized by a syncopal palor, and a momentary but not absolute loss of consciousness. With this patient, under the above treatment, the convulsive attacks disappeared from the first—later the vertigo, and finally the mental wanderings—and for one year past he has not had a single symptom of epilepsy.

With another, aged 45 years, the convulsive attacks began at the age of nine years, and were repeated for many months every eight or ten days. Five he months ago he was put upon the bromide of potass; and from that memont has not had a single attack. We are under obligations to M. le docteur Gratiot, physician to the Fertè-Sous-Journe, who has had recourse to the bromide, after the same method, in two other cases, yet recent, it is true, but where the action of this remedy is not less manifest. The first case is that of a young lady, aged twenty-six years, in whom the epileptic attacks began at the age of nine years, being repeated every four or five days, and composed of two violent paroxysms, followed by three or four more feeble ones. Four months ago she was placed upon the bromide and immediately the interval between the attacks was prolonged, of which she has had but three since, and for two months she has not had one.

In another, the case of a child only three years old, the paroxysms recurred every eight days and were of the most violent character. It has been two months since she was put upon the bromide of potassium, at a progressive dose of from xv. to xxx. gr. At the end of twelve days the paroxysms dis appeared, and have not returned since. She still takes gr. xv. during the twenty-four hours. She is slightly emaciated, but her health is excellent.

In the above cases the remedy was administered in the following manner

Bromide of potassium 20 grammes=about ʒv.

Aquae dist. 300 grammes=about ʒx. M.

Two tablespoonsful which represents about ʒi contains about gr. xxx. of the bromide.

For an adult ʒi. of the above mixture should be given each day—half in the morning and half at night, about an hour before eating. It might be given in a little sweetened water or with a little wine—and immediately afterward the patient should rinse his mouth, to prevent the localction of a the remedy. The dose should then be augmented a tablespoonful every four or five days, until it has reached eight or ten tablespoonsful. This dose, which has never been exceeded, should be maintained for several days. Then it should be gradually diminished in the same manner in which it was augmented. Thus you will return to about four tablespoonsful a day, unless the attacks seem to be but slightly modified, in which case you should maintain a larger dose. The remedy should be continued at a dose of from four to six tablespoonsful during many months, even after the cessation of all attacks.

The dose for children should be but half a tablespoonful, and should be still less for infants. It should be gradually augmented by a half table-

spoonful, but should not be carried beyond four tablespoonful. In other respects it should be given in the same manner as to adults."

In connection with the above cases, I will add a statement of a case of epilepsy in which I have recently tried the bromide of potassium. The patient, who is now twenty years of age, was attacked, without any known cause, for the first time, at the age of six years. Since that time the attacks have gradually become more and more frequent, and for years they have recurred every day, with scarcely an exception; some times being repeated as often as five and six times a day, and of the most violent character. His general health has been good. His physical and mental faculties do not seem to have kept even pace, for while his body is matured his mind remains that of a child. Ever since his first attack he has constantly been under skillful medical treatment, but without benefit. On the 25th of June he was put upon the bromide of potassium. From that time to the 1st of July his spasms returned as usual. From the 1st of July until the 15th, no spasms presented, though at times during this interval he experienced a sort of exhilaration of spirits, *something resembling hysteria*, but "nothing like his old fits," as his father expressed it. On the 15th, 16th and 17th, he had several of his ordinary paroxysms. I am disposed, however, to think these occurred through a mistake by which he did not get the proper dose of the bromide. From the 17th up to the present time he has had no symptoms of epilepsy. He began with xx. gr. a day, and the dose has been gradually augmented until now he is taking ʒ ij. a day. Thus far the remedy seems to have taken hold of the disease and holds it like a strong man.

I shall be happy hereafter to report the result of this case.

August 12, 1866. F. B. N.

A Choleraphilist.

We publish the following extract from a letter recently received by a gentleman in Indianapolis, from an eminent New England physician: Did I write you what an old fellow said about the *Cholera*, the regular Asiatic, Niagara sort? He is one of those old costive *cusses* who has been all his life taking vegetable pills, and eating cracked wheat and gravel stones, molasses and stewed prunes, and can hardly get his bowels open with beetle and wedges. He said he *should like* to have *cholera*—that it must be an enchanting disorder! "Why," said he, and his eyes sparkled, and his coat tail and all under it wriggled with delightful ecstacy, "Why just to think of a constant desire, and a constant success!!"

PRACTICAL MEDICINE, PHYSIOLOGY AND CHEMISTRY.

ART. I.—*Pathology and Treatment of Asiatic Cholera.* By C. G. COMEGYS, M.D., Professor of Institutes and of Clinical Medicine, in the Medical College of Ohio.

THE Asiatic cholera is now present in our city, and having been frequently written to for my opinions in regard to its pathology and treatment, I beg enough space in your valuable journal for a brief, and in the present exigency, very hurried statement of views which I have, more or less, taught for fifteen years past, and more recently presented for discussion in our Academy of Medicine.

These views are drawn from the physiological facts which are scarcely if at all, doubted by any writer; and, the recent large additions to cholera literature, show that several eminent medical men are develop ing similar ideas.

I shall not attempt to present the whole range of facts from which, the generalizations which I propose, are reached; my time does not now allow it, but I hope to suggest enough to excite your readers to see how well a wider collection will illustrate them.

1. The cholera is due to a poisonous agency which originates in the depths of Asia, and moves westward apparently in regular periods of seventeen years. Its presence was predicted in this country in 1849, also in 1866, for years before its advent.

What the nature of this poison is we can not with certainty say—whether meteoric, animalcular, or germinal; nor is it necessary that we should know, no more than that we should know the essential nature of gravity, electricity, or any other force of nature, in order to understand their operations. We can study the phenomena resulting from its presence, that is enough.

2. It is portable—is conveyed from point to point in the tracks of commerce; and, is subsequently developed in its epidemic form in communities thus infected.

3. *This poison especially affects the vascular apparatus of the alimentary canal, and so impairs the hydrostatic conditions upon which the circulation of the blood depends, as to produce an arrest of the circulation; and then ensues a transudation of its watery portions through the immense and superficial capillaries of the intestinal mucous membrane.*

This profuse discharge of water will account for all the fearful train

of symptoms that are presented in the attack; the disturbed circulation and respiration; loss of heat; loss of strength; loss of voice; loss of urine; cold, blue perspiring skin; intense thirst; cramps; shrunken and appalling features; mental hebetude; in fine, the collapse.

There is no doubt that in several places where cholera has prevailed, the attack has been so malignant as to destroy its subject suddenly, even without any watery dejections, or any effusions into the bowels. Life is stricken in its very sources, like a bullet through the heart.

That the normal circulation of the blood, that is, its easy and rapid transit through the extreme arteries and capillaries, is dependent on the tonicity of these vessels, is an accepted fact.

Williams, in his Principles of Medicine, shows the necessity of the tonicity or firmness of tubes for the passage of fluids injected into them by a very simple and conclusive experiment. To a double nozzled syringe he severally attaches a brass tube and a pig's intestine. He found on forcing water into them, that the brass tube discharged double as much water as the intestinal one, when in the horizontal position; but when both tubes were elevated a few inches only the intestinal one ceased to discharge at all; its sides yielding so as to exhaust all the propelling force, *vis a tergo*, whilst the unyielding brass pipe discharged as much as ever.

This experiment shows how flaccidity in vessels interrupts or even prevents a circulation through them.

For the maintenance of this important faculty of tonicity in the bloodvessels of the living body, we have a special muscular apparatus, and this muscular system for the manifestation of its functions, is dependent upon the integrity of the nervous system with which it is related, for it is a law of the muscular structure, that its muscularity is not operative unless the nervous system, is intact. Conditions of paralysis of many muscles abundantly illustrate this remark—notably the sphincters.

These muscular and nervous systems, I need not say, belong to the organic class; and it is not difficult to understand the sudden deaths in cholera, by considering that the poison may act so deadly on the organic nerves as to destroy the innervation of that great mass of organic muscle—the human heart itself.

The coarse experiments of Bernard and Schmidt, show how the tonicity of the bloodvessels is dependent on an intact nervous system. They cut certain portions of the "sympathic" nerve in the neck, and instantly a suffusion of the vessels followed—the vessels relaxed, and blood accumulated in them; but, the application of electricity to the

proximate cut extremity restored quickly the normal state of the circulation.

I call this a coarse experiment, like most of those of Magendie, for no vivi-section can show the actual state of the fine relations of structure and function. Mental states particularly the exciting or depressing passions show far more conclusively the immediate relation existing between the nervous centers and the vascular apparatus.

Whatever arrests the circulation in the capillaries causes a transudation of water from the blood.

This may arise from purely physical conditions—as compression of the veins by a ligature or a tumor, and by thrombi, or the backward pressure of the blood from defective valves and orifices of the heart, or prolonged expiratory efforts as in pertussis; also, from conditions of debility, as in anæmia, or convalescence of disease; or in chronic maladies, such as phthisis; in all of which a degree of atony exists in the vascular system to such an extent that the blood is detained in the capillaries, and water is effused, producing anasarca; so congestions and inflammatory action are accompanied by exudations, causing tumefaction, and when on free surfaces as the pleura and peritoneum, large effusions—and in erysipelas, purulent ophthalmia, remarkable effusions take place. In what other way can we account for the enormous tumefaction following the bites of venomous animals, than the rapid transudation of the water of the blood into the areolar tissue of the poisoned members?

That states of the nervous system may so affect capillary circulation is abundantly shown in cases of sudden diarrhea, diuresis and diaphoresis from mental agitations. But for further illustrations of the influence of the nervous system on the transudation of the water of the blood through the capillaries, I beg to refer to a luminous article by Professor Laycock, in the April and May numbers of the Edinburgh *Journal*, "On Conditions of the Nervous System Causing and Inhibiting Dropsies."

I am now prepared, from these facts, in regard to the influence of tonicity in maintaining the circulation in the vessels, and the dependence of the muscular structure upon innervation for its functional powers, and the rapid transudation of water when the circulation is stayed or stopped, to reassert, in terms, the generalization before advanced; that the poison acting by speciality through the organic nervous system of the alimentary canal, producing atony of the muscular apparatus of the vessels, checking the circulation, and the consequent effusion more or less rapid, of the water of the blood, is the pathological entity of cholera.

I do not care how this deadly agency enters, whether by absorption into the blood at the lungs, and by circulating, striking the nerves in their centers, or as swallowed into the stomach and bowels, impressing the sensory nerves of the mucous membrane, and reacting upon the organic muscular fibers; the result must be the same in its effects upon the circulation. From some recent experiments of Dr. Richardson, of London, certain saline solutions injected into the cavity of the peritoneum produce similar phenomena to those of cholera.

Some eminent writers assert that it is the blood in its morphological constituents which is poisoned. Grant it; but how does that explain the escape of the watery element, except as pointed out? There is no rupture of the bloodvessels, for the red particles do not escape; nor is it an escape of the serum, for there is not enough albumen.

It has been demonstrated that the discharges of various hydrogogues, notably elaterium, are chemically identical with those of cholera. So violent cholera morbus, the result of noxious injesta, gives us similar discharges; but the overwhelming dejections of Asiatic cholera carrying in their flood the debris of thousands of square inches of epithelial membrane, are only imitated in those the result of medication and indigestion.

I shall say nothing on the subject of pathological anatomy—will only assert that all the conditions from the wasted and ruined epithelial surface to the accumulated and viscid blood in the veins and right heart, are due to the loss of water in so rapid and destructive a manner at a surface, whose normal function is absorption and not transudation.

Treatment.—Having demonstrated, I trust, the scientific basis in the pathology of cholera, I have no difficulty in pointing out the therapeutical indications.

Here, let me say, that two things must be considered in its treatment: First, the poison itself; and second, its effects.

In regard to the first, we must employ prophylactics, for the same reason as we employ quinine in miasmatic regions to prevent intermittent fever, and belladonna to prevent scarlet fever where it is epidemic.

In cholera times the poison pervades the air; almost every one is predisposed to attack, and some exciting cause, such a one that would produce an ordinary cholera morbus or a diarrhœa, will rapidly develope the terrible disease. Not only then must every thing be avoided as food, which is not readily digestible, but small amounts of nervous

stimulants are advantageously used to maintain normal innervation in such a manner as to resist the enervating influence of the poison.

Very small quantities of opium, or camphor, or quinine, or of alcoholic fluids are valuable; it is necessary however, to use the quantity so small as not to produce a stimulation from which there would be a depressing reaction. In regard to alcoholic fluids I think they should be used immediately after a meal—of brandy or whisky, not more than half a tablespoonful for an adult, and taken raw. During the terrible epidemic in this city in 1849, I used in my family Huxham's tincture of barks in drachm doses.

In respect to the treatment of the developed disease, I repeat the indication is clear, that is to say, the use of such remedies as will restore the tone of the vessels through whose walls the life current is pouring out; and after surveying the whole list that have reputed value in the treatment of cholera, I know of not one but that in a greater or less degree subserves this purpose.

There are cases in robust persons in which, in the first stage, bloodletting, moderately, would be beneficial. I have never employed venesection; but upon theoretical grounds I am prepared to believe that in some cases it may have done good, by its relief of distended and paralyzed capillaries—allowing the circulation to move again, thus preventing great effusion, precisely as in congestion of the brain's membranes, superinduced so often in the early period of dentition, we are able to prevent a transudation by a timely application of leeches. The uterus contracts better when unloaded. But the great indication in the cases we usually see, is to restore the tonicity of the leaking vessels, not by depletion, but by stimulation, which is accomplished chiefly by impressions made by our remedies upon the sensory nerves.

These, it is well known, are found so abundantly in the free membranes of the body like the skin and mucous membrane, that the point of the finest needle can not impinge their surfaces without wounding them. Now, the relation of these nerves to the muscular apparatus I need not dwell upon, it is so well known, and how promptly a response takes place in the latter to impressions upon the former, I barely make mention. The range then of agents chemical, electrical, physical, mechanical and mental, that influence the nervous system through its sensory fibers, either to excite or depress, is, I repeat, exceedingly wide. It embraces all the astringents from sulphate of copper to tannin, which, certainly, by impressing the sensory nerves, cause reaction in the muscular fiber. So the whole range of cerebral and nervous stimulants, alcohol, opium, camphor, chloroform, ether, and all the

essential oils, all the local irritants, mustard, capsicum, piperin, cantharides, mineral acids and calomel, causing, from its unrivaled cholagogue quality, the outpouring of bile, if it can be made to flow again—bathing the whole mucous membrane and impressing the sensory nerves in a similar manner, to other agents; friction, artificial heat, electricity, ice bags to spine in certain cases; all of these agents and more besides, like strychnia, as readily seen, may be favorably employed to prevent enervation and the consequent atony which leads to death.

As a proof of the general law of treatment which I have pointed out, I need only refer to the mass, the endless variety of formulæ proposed in the treatment of this disease. It is extraordinary to find one that does not include camphor or opium, or both, and some astringent or diffusible stimulant. As a powerful and permanent stimulant upon the sensory nerves in order to overcome the flaccidity of the leaking vessels, I know of nothing that surpasses the effect of a large blister, the action of which, in changing transudation into absorption, is so well seen in the treatment of hydrothorax.

The treatment I usually adopt for the early stage, to overcome the vomiting and purging, while the skin is warm and the pulse good, is, one ounce of camphor water, and fifteen drops each of laudanum and diluted nitric acid, to be repeated at once, if vomited quickly; otherwise at intervals of half to one hour, and furthermore as needed. Any one who will try this in cholera morbus will, I am certain, be satisfied with it. But if the prostration is considerable, and the dejections profuse, with lowering temperature, I at once apply a blister and give ten grains of calomel, two of camphor, one of opium; then camphor and opium in smaller doses with varying quantities of calomel. I very often dissolve camphor in chloroform, two scruples to the drachm, and give ten to twenty drops, frequently to meet the urgent symptoms. I also frequently add capsicum or piperin to the powders above named. In order that the blister should be quickly established, I direct a surface of 8 by 10 to be painted with cantharidal collodion, over that a cloth wet with turpentine, and heat applied sufficiently to make a quick vesication.

We save about two thirds of all the cases that are brought to the hospital, which includes the collapse cases, who are so often moribund. Of strictly medicable cases scarcely one dies.

Several patients have died in the wards from uræmia, superinduced, it is to be feared, by over doses of narcotics.

Nearly all the cases brought in fully collapsed, have died; in point of fact they are moribund—are mortally wounded on arrival.

Cold as a frog or a fish, exhausted, pulseless—the water and salts of the blood gone; the corpuscles shrunken, dead by the million, blue-black and stuffed in the venous capillaries, trunks and cavities; the epithelial membrane of the stomach and bowels a ruin, hanging in shreds and patches or washed away in the lost waters of the blood; the voice sunk into hollow whispers; the features pinched, shrunken, blue, blank, changing only into sardonic expressions by the agony of the horrid cramps, suffered by the members below; such is a feeble picture of what is so often witnessed in the collapsed stages of this disease.

What may we hope to do for the sufferers of such a murderous attack? Warm them if we can—stimulate them if it be possible—feed them with nutritious juices and saline waters, if they may be retained; but all our efforts are generally vain; hopeless as to save the ship grinding to pieces on the rocks, or wallowing water-logged in a pitiless storm.

But some do recover, we know not how; and as the true mariner still struggles to save his ship, so we must always labor to sustain nature's feeble powers.

Apologizing again for incomplete and hurried character of this production, I am, yours truly,

C. G. C.

Remedies for Diarrhea.

We proceed, as we promised, to give a comparative view of the remedies for bowel disorder. In so doing we go on the positive, not on the negative plan. That is say, if practitioners of experience report that any given class of remedies proves efficacious in their hands, we accept the fact; and if other practitioners report good results from an opposite class, or apparently opposite class, of remedies, we accept that fact also. And we take liberty to use the solution of this seeming paradox which common sense and experience furnish us with. That is to say, we assume what we know to be true, that the cases in which opposite remedies are respectively used belong to opposite classes of cases, or else that divers remedies may attain the same end in the same class of cases by opposite routes.

The remedies which we propose to consider—shortly and in the space of one essay—were enumerated in a late article, and we give them again, in alphabetical order.

Acids, Alkalis and absorbents, Antiseptics, Astringents, Calomel, Meat, Opiates, Purgatives, Stimulants.

The questions we have in view are these:—Supposing a man has to treat a crowd of patients affected with diarrhea, what is the best general, shall we

say routine, remedy? What, if used indiscriminately, will do good in the greatest number, and harm in the least number of cases? And, on the other hand, supposing time and circumstances allow of a discriminate and individual application of remedies, what are the cases for which each remedy is best adapted?

We must also say, that we are discussing remedies for diarrhea, and possibly for cholerine (this one word *cholerine* is better than *choleraic diarrhea*), not for cholera, *i. e.*, the stage of collapse; further, that the absolute repose and warmth of bed is a means of safety which it is difficult to over-estimate; and besides, as our correspondent said, in his account of a visit to Amiens, it seems possible that a patient who is *cured* of diarrhea shall yet die of cholera.

1. The acids are the more worthy of trial by those who have never tried them, inasmuch as they seem at first to run counter to all our English opinions and traditions. Yet lemon juice and salt is the old and popular remedy in Italy and the East for diarrhea. Traces also of treatment by acids are found in the writings of some practical physicians of the last century. But, so far as we know, the person who first brought them into vogue in England was an obscure practitioner named Coleby, in Bermondsey, who gained a reputation and a fortune by his use of dilute nitric acid in large doses in the premonitory diarrhea during the cholera epidemic of 1832. Since that time the sulphuric acid has come into vogue, and its use has been advocated by many practitioners, as Mr. Boddington and Mr. Tucker, and it has now become so popular that it can not be considered as the specialty of any one. Any acid appears to answer—sulphuric, nitric, phosphoric, hydrochloric, tartaric, or citric. Mr. Tucker pointed out, in 1854, the value of *cider*, with its malic, acetic, and tannic acids; but the sulphuric seems really the best and most convenient. The right way of using an acid for diarrhea is not to give it in any measured dose, but to cause it to be mixed with water, sweetened and flavored with ginger—say half a drachm of dilute sulphuric acid, two drachms of syrup, and half a tumbler of cold water. The patient may dilute it and sweeten it to the precise point he likes, and be told to drink it freely in as great a quantity as he likes; but few care for more than three drachms in the twenty-four hours. The effect of the remedy seems direct and positive. It stops diarrhea, quells pain, puts an end to the generation of flatulence, and leaves the patient well. Most positively there is nothing purgative in its action. It is suited for atonic diarrhea, with clean tongue, in every stage. Where diarrhea has been going on, leaving the belly puffy with griping pains and flatulence, the acid acts like a charm. Again, in the cases of diarrhea which affect over-fed people—with foul tongue, yellow eye, and loaded liver (as we assume)—the acid is a good remedy by itself, but better if employed as an adjunct to a dose of calomel. Moreover, as a prophylactic, as Dr. MacCormac has shown, it is of very great value. The minute that a man says he can't eat through the heat, and lives upon beer, he should be advised to take some mineral acid in bitter infusion. It will not be taken for granted that there are no cases in which it fails. In some

it fails, apparently without reason; and in cases where there is a red, irritable tongue, it should not be tried. But there is one almost certain indication—that if the patient likes it, it is almost sure to cure him; if he dislikes it, it will almost surely do him no good. The acids, moreover, are adapted for all ages and conditions, from the infant at the breast with chronic, or atonic, or serous diarrhea, to the veteran in his second childhood. The Elixir of Vitriol, or aromatic sulphuric acid, is nicer, and well adapted for private practice; but the common pure acid is quite good enough for most cases.

2. There are the alkalis and alkaline earths, as chalk, to which, we suppose, bismuth must be added. There is no doubt that these remedies have a certain force, though not much in severe cases. They deodorize, or neutralize, or alter the quality of the intestinal mucous membrane, and (if employed alone) are suitable for infants and persons with red tongues and irritable, possibly ulcerated, bowels. The dose of chalk or bismuth should be very much larger than is commonly given, say thirty grains every hour—quite enough to produce a decided chemical change in the contents of the alimentary canal, and to be detected in the fæces.

3. Antiseptics—*e. g.*, creosote, in doses of one drop in pills, is good in many an atonic diarrhea. Its *modus operandi* seems clear.

4. Astringents. Under this head we have the vegetable astringents, as gallic acid, catechu, tormentil, etc., adapted for atonic diarrhea with clean tongue. But it must be observed that these remedies are seldom given without opium, and that they do not appear superior to sulphuric acid—certainly not so good for popular use. Of mineral astringents, the acetate of lead, in two or three large doses, is most in vogue, especially with Indian practitioners.

5. Calomel is the English remedy *par excellence* for all cases attended with foul loaded tongue, yellow eye, thirst, headache, etc. We believe that it really has the power of checking pale serous stools, and of producing thick offensive, colored ones, and in the right cases is without doubt the most powerful and certain remedy we have. In the opposite class it is equally mischievous.

6. Raw meat pounded into a pulp is a remedy which we first saw used by Professor Trosseau, at the Hôpital des Enfants Malades, in Paris, nearly twenty years ago. It is especially adapted for young infants, who take it greedily; it appears to be digested without effort, and, by giving healthy material to the blood, cuts off those causes of diarrhea which consist in an impoverished state of blood. Its specialty is as a remedy for infants and children with whom nothing else agrees or is digested. But it is also the food *par excellence* for any case whatever at any age in which food can be taken. Raw mutton is the thing—deprived of skin and fat, and pounded in a pestle and mortar till it is a mere paste. This may be given with or without a very little sugar to infants, in a dose of a teaspoonful at a time; adults may take a larger quantity diffused through cold beef tea. We have established the fact to our own satisfaction that meat *raw* differs from meat cooked in

being more digestible, although meat cooked, if pounded to a powder and used to thicken broth, is a most useful food for adults, so soon as food is permissible.

7. *Opium.*—That this blessed and priceless antidote to human woe should be useful in diarrhea, is no more than might have been expected from its power of allaying irritation and pain and local afflux of blood. And the largest experience shows that with an ill-fed, ill-conditioned, below par population small doses of opium act like a charm in a large percentage of cases of atonic diarrhea with a clean tongue. Its action and use in such cases are consistent with the whole science and practice of Medicine and Surgery. Let us suppose that the *bowels are loaded*, and that there are diarrhea, pain, and spasm. The bowels are clearly unequal to the task of efficiently and vigorously discharging their contents; and in giving opium the practitioner does what the surgeon does when a patient with an irritated bladder can not pass his urine, and what the accoucheur does when a woman is plagued with inefficient uterine action. Opium rests a weary colon, and allows it time to gather strength to discharge its duties with vigor. There are two classical works on surgery—Vincent's "Surgical Observations," and Hilton's "Lectures on the Principle of Rest;" both concur in advising the use of measures to allay fretfulness of the whole body and of parts, and to give time. Any one who denies the value of opium in atonic painful diarrhea, must be put out of the category of arguable persons. Equally ought that man be sent to Coventry who affirms that it is a universal remedy. Opium used indiscriminately in cases in which acids or calomel or purgatives ought to be used—that is, in cases where the tongue is coated and foul and there are evidences of loaded liver or *embarras gastrique*—may make the patient ill for weeks. We believe that we have seen fatal results follow the summary suppression, by opium, of a salutary diarrhea, in over-fed, gormandizing, red-faced, tight-bellied personages, especially women.

8. *Purgatives.*—When diarrhea occurs to persons who have previously suffered from constipation, in whom there are evidences of loaded bowels—fœtid, lumpy, quasi-dysenteric stools—the belly showing by palpitation and percussion signs of accumulation in the colon, and the mouth and tongue nauseous, then the practitioner need seldom refuse to venture on a dose of rhubard and polychrest salt or castor oil, preceded or not by a dose of calomel. When the motions are inodorous, and the belly is empty, the use of purgatives is simply cruel.

9. Stimulants, such as ether, essence of camphor, the essential oils, as peppermint, cayenne pepper, and more especially the almost too familiar prescription of a hot and strong glass of brandy and water, are of well known efficacy in almost all cases of diarrhea, except those attended with marked *embarras gastrique.*

If we may sum up our own impressions of *single* remedies, we give the first place to acids, as being more serviceable and less noxious than any other in the greatest number of cases; but for cases attended with well marked symptoms of pain they are inferior to opium, in those with *embarras gastrique*

to calomel, and in those of fæcal accumulation to calomel, or rhubarb with polychrest salt. Still they are the best single or universal remedy.

Whilst the science of therapeutics demands the employment of remedies singly, the necessities of practice compel combination, in order to secure different or even opposite effects, and so to hasten the patient's cure. The acids may be used as auxiliaries to any other remedy if the patient relish them. Opium may be combined with stimulants in atonic painful diarrhea, and the popularity of the compound called chlorodyne shows it to be a useful model for imitation now, just as itself is an imitation of the ancient cordials and theriacas. Opium, in fact, which soothes pain, may be combined with eliminative remedies, so as to add the *tuto* and *jucunde* to the *cito*. Of such combinations the time-honored one of calomel two grains, opium half grain, is one which scarcely needs our praise. For a severe case it probably is the best thing that can be prescribed. It may also be combined with acids, or with alkalis, absorbents, astringents, and stimulants, as in the well known compound chalk powder with opium.

The other day, happening to talk with a lady of rank on the cholera, we were asked, "Do you belong to the brandy faction, or the calomel faction?" We hope that our foregoing remarks have shown that there need be no factions at all, and that each remedy is good in its place, and that that place is pretty well known to practical men who are not committed to any faction.—*Lond. Med. Times and Gazette*, July 28, 1866.

"Common Sense Treatment of Cholera."

Messrs. Editors: The following extract from Gairdner's *Clinical Medicine*, published in Edinburgh, in 1862, may interest some of your readers who have perused the controversy in reference to the Common Sense Treatment of Cholera. The very high position of Dr. Gairdner gives to his opinions no ordinary weight, and must afford gratification to Dr. J. F. White, who advocated the same treatment. MEDICUS.

"It is evident, that for a long time to come, the treatment of cholera can not be fixed by the examination of records. 'Till it is so fixed, the practice in individual hands must be regulated in a considerable degree by theoretical or rational considerations; or, rather by that peculiar combination of rational and empirical judgment which passes in the world under the name of *common sense;* the tribunal to which so much, besides cholera, affecting the interest of individuals and of the community, is in these days referred. Hence the importance to practical men of just ideas of the pathology of cholera, and minute knowledge of its phenomena, by which, and by which alone, they can estimate the success of their own treatment, or that of others, in individual cases."—pp. 221-2.

Dr. G. then alludes to some of the remedies which have acquired reputation as specifics in cholera, when at page 227 he thus remarks:—

"It is a remarkable fact, as pointed out by Mr. Ross, that in all these the

administration of cold water by the mouth plays a prominent part, and when we consider the success which this remedy alone appears to have had in the hands of many practitioners, it is impossible not to think favorably of it in cholera. * * * * *Add to this, that it is most grateful to the patient, whose burning thirst seems always to point to this as the most appropriate resource for his relief.*" (The italics are our own).

EDITORIAL.—Mr. Goodeve, in his article on Epidemic Cholera, published in the first volume of Reynolds' *System of Medicine*, page 180, Lond. Ed., thus remarks: "The best thing for him in the stage of full collapse is to gratify pretty freely his instinctive desire for cold water." But he also adds: "It is of no use to keep up patient's vomiting by giving him as much as his morbid thirst impels him to swallow." Again: "There need be no restriction placed upon the quantity of water given, beyond that it is advisable not to provoke too much vomiting by it." At page 181 he remarks: "Many of the extreme collapse cases will come round by themselves as well or better without stimulants as with them, and, therefore, we must not suppose that we are accelerating death by leaving the patient to cold water in such cases."

Insomnia, or morbid wakefulness, has so much in common with insanity that it must of necessity be studied in connection with this subject. Practically, we have to be upon our guard, and to fear the approach of insanity, when we hear that a man's sleep is gone from him, and when the attack has commenced, the procuring of sleep is often the most important point in the treatment. Theoretically, the physiological and pathological condition of insomnia is closely allied to that of insanity. Sleep is prevented by an accelerated rate of cerebral circulation. The vaso-motor system is stimulated by mental or bodily causes, and before sleep can come these stimuli must be removed or counteracted. The abnormal stimulation I have just spoken of will produce loss of sleep in the first instance, as it produces insanity secondarily, and hyperæmia is the condition of both. The remedies too, which benefit the one, will be of no less service in the other. Change of scene, food, exercise, the removal of pain, worry, and discomfort are valuable alike to the bad sleeper and the insane sleeper.—*Blanchard on Insanity, in Lond. Times and Gazette*, July 1.

MISCELLANY.

The Sphygmograph.

The Sphygmograph which is exciting some attention just now, is one of those ingenious instruments which have been devised of late years, promising really to assist medical men in reducing their art to some thing like a science. Its great merit is this, that it gives a permanent and minutely accurate record of a phenomenon which before was known only by the very unsatisfactory discrimination of the sense of touch.

The sphygmograph is an instrument for producing a self-written record of the swellings and contractions of the arteries known as the pulse.

Its inventor, Dr. E J. Marey, is a Paris physician, who is well known for many physiological essays. The main features presented by the instrument are the following:

A principal beam of light construction is fastened on the arm by carefully padded straps; to this is attached a lever of nearly the length of the forearm; the shorter arm of this lever rests gently but firmly on the pulse; at each rise of the artery and subsequent fall, the motion is exactly imparted to the lever, and the end of the longer arm performs the same movements as does the shorter, but on a much larger scale. To the end of the longer arm is attached a fine pointed pencil, in contact with which a smooth strip of paper is made to move by clock work in a horizontal direction. The effect of this arrangement is, that a straight line would be drawn on the piece of paper were it not for the rhythmic perpendicular movement caused by the pulse, which results in the production of an undulated line, the waves in which represent the separate expansions of the artery; of course, it is evident that since the movement of the paper is invariably uniform, the variations in the pulse will be distinctly indicated by the hight, length, and form of the waves; and accordingly we have a most accurate and valuable means of comparing the pulse in various individuals and under various circumstances. Some interesting results have been obtained by studying the pulses of diseased persons, and the instrument has been found to exhibit phenomena in the pulse which it was quite impossible to detect by the rough-and-ready means of the fingers. The "sphygmogram" of a person afflicted with a certain disease of the heart, for example, is found to exhibit a series of undulations, the ascending line of which is very long and tremulous, and but slightly oblique, while the descending is abrupt and nearly perpendicular. The application and value of the instrument will be apparent from these remarks.—*Quarterly Journal of Science*, London, July, 1866.

Medical Observations in Asia.

Dr. Parvin: — Acting upon your suggestion, to give you a synopsis of "Medical Observations," of my experience in oriental lands, I have reviewed my "Diary," and find the notes very meagre upon "professional matters;" but, such as they are, I present them to you, and hope you may find something of interest.

I find, that after a delightful voyage of forty five days from San Francisco, my Notes are dated from Hong Kong, having stopped one day at Honolulu, Sandwich Islands. The weather was delightful, and not a case of sickness occurred during the passage. When three days from Hong Kong, had a case of fracture of the radius, right arm, at middle third, which upon our arrival, was transferred to the English Hospital. Upon visiting him the ensuing day, "was perfectly astonished at the appearance of the hospital: commodious, cheerful, and homelike. Compared with our own American hospitals it is a perfect palace."

Two months later was in Amoy, and found that the hospital at this point surpassed any I had yet seen. "It is situated upon a knoll, to the east of the city, overlooks, the harbor, and is one story high, with extensive halls and high ceilings. Each ward is about thirty feet broad, and accommodates six beds. The windows extend from the ceiling to the floor, and are four or five to each ward, while they open upon a nice court, thus affording free ventilation. The walls are plastered, and look white and cheerful. The kitchens are separated from the main building. Nurses and most of the attendants are natives, and they are numerous. The medical officers are Englishmen. At this time there are very few cases in the hospital, and they are principally dysentery.

The hospitals in China, and there are many of them, in my judgment, are first class institutions; and I often found myself comparing them with the old "Commercial." I thought it strange that a place of so much wealth, intelligence, and apparent scientific aims as Cincinnati, should allow finer hospital advantages to exist in heathen lands than with herself. It may, however be stated, that these buildings are designed by, and created with, the money obtained from "*civilized* people," and are for the benefit of seafaring men, although numbers of the natives derive medical benefits therefrom.

At Shanghai, I formed the acquaintance of Dr. Lockart, a devoted student, and conversant with Chinese literature. Principally from him I learned that the "doctors" have an idea of anatomy, primitive it is true, but approaching correctness, while their ideas of physiology and treatment of cases are both novel and amusing. I have never seen the operations of Chinese physicians, but have read many amusing accounts in "Ripa's Residence," and from Dr. Lockart, to which I must refer you. They have their apothecaries; and from the number of articles put up in their prescriptions, I should truly call them "shot gun" in character. Those medicines I have seen administered were either in the form of decoction or powder. I never saw a pill made or given

China affords a vast field for the study of eye and skin diseases. Dr. Parker, in Canton, has had probably more cases of these diseases to treat, than any living physician. Cutaneous diseases are more prevalent in Asia, than any other disease, probably due to the extremely dirty habits of the inhabitants; for it is not uncommon to see men, women, and children, hogs, dogs, cats, and fowl, occupying the same room. The diet of the Chinese, is principally pork, fish, and rice.

In this country an immense quantity of rice is raised, and the swamp land is very extensive, therefore intermittent fever prevails as a common disease. South from Hong Kong, bilious fevers are in the ascendancy. Cases of elephantiasis, leprosy, and tumors of all kinds were daily seen about Shanghai, Amoy, and in Siam. In those posts thrown open to trade syphilis largely exists, and is particularly severe in its character. The climate of Shanghai is about the same as in Cincinnati, and it is stated that pulmonary and rheumatic complaints are common at that port. Foreigners, and by that I mean seafaring men, on this coast, are principally troubled with syphilis, intermittent and bilious fevers, rheumatism, and dysentery. While in Siam, out of a crew of twenty-four men we had fifteen laid up, and lost, in three weeks, nine men from dysentery. The weather was *intensely hot*, and the crew ate freely of fruit, of which this country is so prolific; and to this may be attributed the large number of cases.

At Bangkok there were several cases of syphiloid fever and any number of cases of cholera morbus among the various crews. It was not until on my way from Manilla to New York, I had an opportunity of seeing any cases of scurvy. We were over time fifty days, short of rations (miserable at that), when we had three cases, one of which terminated fatally. The symptoms and appearances of these diseases did not differ materially from the descriptions of them in our works on "Theory and Practice;" and I have therefore attempted no description of them.

While in Japan and up the Persian Gulf we had no cases of sickness, nor did I have an opportunity to find out what diseases prevailed. At Bombay visited a hospital devoted to animals and was much amused at the same.

The observations upon the reptiles, insects, and birds of this country are very interesting; but this is not the time nor place to enlarge upon the same.

For the study and pursuit of botany this is also a fine field. Fruits of all kinds and species are found; but the United States surpasses all other countries in her pears, apples, cherries, and like fruits.

One of the first things that attracted my attention in Southern China was the extensively red lips and gums, and black teeth of the natives, which I found was due to the use of the "betel nut;" they using it as we do tobacco, that is chewing it. I find that it is used from the islands where the palm grows through the country of China, and from the Red Sea to the Pacific Ocean; for a description of which I am indebted to the Chinese Commercial Guide. It says, "the areca nut is the fruit of a slender, graceful palm, about six inches in diameter and thirty feet in hight. The nut, when husked, resembling a nutmeg in color and shape; but larger and harder. The mastica-

tory is prepared for use here in the same manner as in the islands, except the Chinese color their lime red. When used the nut is cut into thin slices, and wrapped in fresh, raw pepper leaves, adding shell lime enough to give it a flavor. All classes of people use it, male and female. It is said to sweeten the breath, rectifies and strengthens the stomach, and preserves the teeth; giving to the lips and gums a dark red appearance and blacking the teeth, which among the Malays, is regarded as a mark of beauty. Persons of rank carry it in rich cases, and it is regarded as a token of friendship should you accept it as a present.

Among oriental plants there are none presenting more beauty, as it sways itself to every breeze, than the bamboo. Its uses are so varied that time will not now permit an attempt at description.

The sweet flag (calamus) is used, to a great extent, "for its spicy warmth." Onions, garlic, and aloes, so well known to us, are largely raised. One of the most pleasant stomachics, ginger, is cultivated and largely exported; the preserved ginger being a dinner dish. The juniper, willow, and oak are found, but are principally used for ornaments. "Galls are used for dyeing as well as for medicine." The croton and castor oil plants are indigenous. Rhubarb, in large quantities is brought from "the interior to Canton." Liquorice is held in high esteem. Ginseng grows wild and is a government monopoly. Tobacco, stramony, and capsicum are mostly cultivated; the tobacco is very mild, and is used for smoking and snuff.

Williams, in his work on China, has given a very full description of its botany, and a reading of which will prove very interesting. Upon some future occasion I may endeavor to give you more enlarged ideas upon matters in general regarding the "flowery land;" for it is a pleasant task to review "those" days, so happily spent with the people who take their origin, or claim at least that they have existed as a nation, previous to the building of the "Tower of Babel."

C. O. Wright.

On the existence in the Texture of Animals of a Fluorescent Substance closely resembling Quinine. By Dr. Henry Bence Jones, A.M., F.R.S., etc. (From the *British & Foreign Medico-Chirurgical Review*, July, 1866.)

The discoveries of science are truly marvelous. Who, a few years ago, would have been bold enough to imagine that fluorescence, the property of emitting light-like fluor-spar when heated, could belong to animal tissues and their fluids under the influence of electrical light? or who could have conjectured that this property is owing to the presence of a substance similar to quinine, so similar, indeed, as to be strictly entitled to the name given it by its discoverers, of quinoidine! Yet this marvel is shown to be a fact in the most convincing manner by Dr. Bence Jones in the paper before us, which was read at the weekly evening meeting held at the Royal Institute (that prolific mother of great discoveries), on the 23d of March last, and was at the same time amply illustrated by experiments.

Not merely was proof afforded of the similarity of the two by optical phe-

nomena of fluorescence in the spectrum produced by electric light, but also by a close similarity of chemical properties.

The inquiry leading to the discovery of quinoidine, originated in experiments on the diffusion of quinine through the animal tissues, being a continuation of that relative to chemical circulation by œmotic action which we noticed in our "Review" for October, 1865. From the results of numerous and very carefully conducted experiments, he comes to the conclusion that quinine when used, that is, taken internally, "goes everywhere," even into the crystalline lens, and that everywhere it goes it meets with the naturaf fluorescent substance like quinine, which most probably is constantly forming and undergoing oxidation. And, referring to its medicinal effects, he adds:

"The incoming quinine causes a temporary excess of quinine in the textures. Probably it causes a stoppage of the fresh formation of quinine from albumen, a temporary arrest of the changes going on, a transfer of action probably to the quinine introduced, so that with large doses deafness and great prostration and almost imperceptible pulse are produced in man, while in guinea-pigs death even is caused by the extreme prostration. In small doses quinine, probably like alcohol, gives an immediate stimulus when the first chemical action takes place; but soon the quinine retards the chemical changes in the nitrogenous substances, just as alcohol, by its secondary action, retards the chemical changes in the hydro-carbons in the different textures."

From the ascertained facts, to-wit: the results arrived at, the author looks forward to two hopeful prospects—one the explanation and cure of ague, the other the treatment of diseases in parts of the body external to the blood-vessels, such as the crystalline lens. We quote his words in explanation:

"1. Assume that a substance like quinine exists in health in the textures, can its rapid destruction and removal through the action of the marsh-miasm give rise to ague? Does quinine cure ague by furnishing a substance which retards the changes which go on in the textures? And in the well known property of arsenic to preserve organic substances, have we also the explanation of its power in curing ague?

"2. If chemical circulation can carry alkaloids even into the non-vascular tissues, is it not reasonable to suppose that medicines pass through the blood and act on the textures?

"And is it not most probable that they take part in every chemical change that occurs outside the bloodvessels, as well as in the blood itself? Still further, may we not expect that among the multitude of new substances which synthetical chemistry is now constantly forming, some medicines may be discovered which may not only have power to control the excessive chemical changes of the textures in fevers and inflammations, but may be able to remove the products of insufficient chemical action, even in those diseases which affect the non-vascular textures, as, for example, in cataract and in gout?"

Science and Crime.

It has frequently happened in the history of crime that some great culprit has been arraigned for poisoning, and medical or chemical evidence has been called by the prosecution as well as by the defense. On such occasions it has sometimes occurred that men of the highest scientific attainments, taking opposite sides in the trial, have given evidence on apparently simple scientific questions of a totally contradictory character. Under such circumstances the counsel for the defense has not unnaturally taken the utmost advantage of the difference of opinion, and in a few isolated cases perhaps, great criminals may have escaped the punishment which their crimes deserved.

"The world," always more ready to criticize and condemn new movements, than to inquire carefully into their merits, has, in consequence of these occasional anomalies in scientific evidence, been disposed to look with contempt upon the efforts of science in the detection of crime; and "differing doctors" have become a by-word in matters of criminal law. But instead of acting as an obstruction to the course of justice, scientific investigation has become the terror of evil-doers, and if it has not succeeded in putting an end to certain classes of homicide, it is simply because criminals are either so foolish as to suppose that *their* case has been so cleverly managed as to defy detection, or so wicked as to be deterred by no consideration whatever from the execution of their designs.

We could point to innumerable cases where the administering of poison has been suspected by the medical attendant or relative, and it has been detected in the chemist's laboratory, but we feel sure it is unnecessary to adduce any evidence in proof of this to our readers; to them it must be a fact perfectly familiar in the annals of crime. Link by link the untiring chemist has formed the chain of evidence, here tracing the death-potion in the tissues, there in the stomach, there again in the heart or vascular system; and when one reads the accounts of these trials, how unerringly the guilt is almost in every case brought home to the heartless transgressor, it appears surprising that there should still remain men insensate enough to suppose they can tamper with the human system without certain detection.

Added to this facility for tracing poison, the microscopic study of the blood corpuscles of the vertebrata has given additional means for exposing murder and violence, and recently a third method, more exquisite than any hitherto known, has been added to the list of silent, invisible detectives.

When our correspondent, Mr. H. C. Sorby, first published in these pages his astounding revelations concerning the detection of blood in fabrics, when he told us that he could trace the presence of the vital fluid months after it had been spilt, and after the fabric had been repeatedly washed with the view to obliterate the stains, we had the pleasure on the one hand of receiving communications from scientific men who at once appreciated the great value of the discovery, and on the other hand we were amused by the skeptical shoulder-shrugs of "the world" which would be "very sorry to condemn a man to death upon such evidence."

Without here discussing the propriety of condemning a man to death on any evidence or for any crime, we have to point out the fact that "the world" is again, as it has often been and will be, erroneous in its judgments on scientific matters; for largely, if not entirely, in consequence of the investigation by spectrum-analysis of the blood-stained wood of a hatchet-handle, a man at Aberdare has been sentenced to death for one of the most deliberate, cowardly, atrocious murders that the world ever witnessed.

The crime in question, known as the "Mountain Ash Murder," was committed last September by a youth aged eighteen, called Coe, the victim being another young man, called John Davies, residing in the same locality, and the trial came off in March of the present year.

It is unnecessary to pain our readers by the full details of the crime, which attracted considerable attention at the time; and we shall state as concisely as possible how scientific research succeeded in securing the conviction of the murderer. On a certain Saturday in September, the day on which he received his wages, the murdered man was last seen in company with the criminal, who has since perished on the scaffold; and from that time until the first, of January nothing was heard of him. On that day a farmer, also called John Davies (the same name as the deceased), discovered a dead body in a wood in the neighborhood of "Mountain Ash," the head being severed from the body, and lying some distance from the trunk. He at once applied to the police, by whom the body was removed. It was already, to a great extent, decomposed, but was identified as that of John Davies by his father; and here comes the first result of scientific acumen. The father recognized a portion of the clothing found upon the body; but this would have hardly sufficed in evidence.

Young Davies had, however, had a back tooth drawn by Mr. Brown, a surgeon, *two years before the murder;* and that tooth had been preserved by the unfortunate young man's father. It was now inserted into the jaw of the corpse, and "it fitted as well as it could, considering the length of time which had elapsed." So much for the identification of the body; now for the evidence which saddled the murderer with the crime.

The blows upon the head of the deceased which caused his death, had been inflicted, the medical men said, with "some sharp cutting instrument," and it appears that on the day of the disappearance of Davies, Coe had borrowed an ax of a man called Swan, which he afterward returned secretly and in a dirty state. This ax was carefully examined, and, as it had been cleaned by Coe on his being remonstrated with by Swan for returning it in such a state, it showed no external traces of blood; but the investigators, Dr. William B. Herapath, F. R. S. (of Bristol), and Mr. Brown, the gentleman already referred to, removed the handle and examined that portion of it which had been concealed by the blade. There they found what appeared to be stains of blood. This it was clearly proved to be by spectrum-analysis, and by ordinary microscopic observation. Dr. Herapath said, in his examination, that finding the evidence resulting from the detection of globules to be small, "I obtained more numerous sections of the colored surface of the handle of the hatchet—

immersed them in distilled water and obtained thereby a slightly colored solution, which after filtering, was ready for chemical tests, and for optical examination by the micro-spectroscope. I subjected the fluid to the action of light, and it had undoubtedly the properties peculiar to a solution of blood. When a solution of blood was examined in this instrument (instrument here produced), the fluid absorbed some of the rays of light, and thus altered the spectrum or rainbow. Within the green and on the border of the yellow rays two dark absorption bands were produced by the blood fluid. Only one other substance would produce two dark bands—that is cochineal dissolved in ammonia, but the position of the two bands was different. The spectroscope alone would not enable me to *readily* distinguished between the two, but combined with chemical examination it would satisfactorily do so. From this optical test I was satisfied that the sections of the hatchet had been stained with blood—and by chemical analysis I also demonstrated it was blood. The combination of the three tests showed that the substance on the hatchet must have been blood."

The globules, or blood-corpuscles we should rather say, resembled those of the human subject; or, as Mr. Brown, the surgeon, is reported to have said in the cross-examination: "The globules of the blood on the hatchet, were nearly the same size as those of a pig, which is nearest in size to that of a human being."—*Quarterly Journal of Science, July*, 1866.

Practical Homœopathy.—M. Reymond, in a recent lecture on Heine, the German wit and satirist, tells a good anecdote. Heine and his wife, traveling in the south of France, met Ernst, the violinist, who begged of him to take charge of one of the celebrated Lyons sausages for one of his friends, a homœopathic physician. In those days, railroads were not, and the road was tedious. Madame Heine became very hungry, and could not resist a little piece of the sausage, which she found excellent. Presently, Heine joined her, and was quite of her opinion; and, in fact, the sausage was a great treat, and on their arrival at Paris had so diminished in size that Heine dared not forward the mere stump that was left to its destination. But he thought better of it, and cutting with a razor a slice as thin as paper he placed it in an envelope, together with the following note:

Dear Doctor:—As a result of your investigations the fact has been acquired by science that millionths of parts produce the greatest effects. Accept, then, the accompanying millionth part of a Lyons sausage which Ernst charged me to remit to you. If homœopathy is indeed a truth, this little portion will produce on you the same effect as the entire sausage.

Yours,

Henri Heine.

On the Treatment of Post-Nasal Catarrh.

Sir:—At the conclusion of your review of Dr. Dobell's recent work on "Winter Cough," etc., allusion is made to what is very aptly called post-nasal catarrh, as a disease frequently associated with pulmonary phthisis, and a regret is expressed that the writer of the useful work under review has not

pointed out some special method of treatment for this annoying complaint. In this regret, I, in common probably, with others, share; for I have frequently had patients decidedly phthisical complain very persistently of discharge of exudation of mucus, sometimes of offensive kind, from the back of the throat and from the posterior nares, and in some instances the attention of the sufferer has been more anxiously directed to the mitigation of this constant source of discomfort in the throat, than to the relief of the more serious lung symptoms within the chest.

I have found lately that many cases of this post-nasal catarrh that have derived but partial relief from tonics, change of air, and astringent gargles, will often take a prompt turn for the better upon the administration of iodide of potassium and chlorate of potass, of each salt two to five grains in a wineglass of water or camphor water. Given thus in a plain aqueous medium, I am sure that the salts act better than when mixed with syrup or any bitter infusion or tincture.

Another simple and excellent remedy I have found in carbolic acid in the form of lozenges. From four to six of these lozenges should be eaten daily, and they will do much to correct any fetor about the mouth, and restrain undue discharge of mucus, and further, they will mitigate cough very sensibly in phthisical cases.

In very obstinate cases the injection of a weak solution of permanganate of potash or of tincture of iodine freely diluted with water, through the nostrils, may be had recourse to with advantage.

I may just add that the carbolic acid lozenges I have used are sold in corked bottles by Rew & Co., Regent street.

I am, Sir, yours obediently, JOHN C. THOROWGOOD, M. D.,
Assistant Physician to City of London Hospital for Diseases of the Chest.
Queen Anne street, July, 1866. [*Lond. Lancet*, July 21.

MEDICAL COLLEGE OF OHIO.

The reduction in the fees for tuition by the majority of the Ohio Schools, forced upon them by the low fees of the Northwestern colleges, is likely to arrest the tendency which has hitherto prevailed among many medical students to leave their own State, and from present indications the Medical College of Ohio will have the largest class ever assembled in her walls. The Faculty of this venerable Institution are making every preparation to meet the requirements of so large a class, and feel confident that they can offer to medical students unsurpassed facilities for acquiring didactic and clinical instruction.

As it will be seen by the circular of the College, the Trustees have established the chair of Ophthalmology and Aural Surgery, and have selected Dr. W. W. Seely, M. D., to fill the place. Dr. S. is well known as an accomplished oculist and aurist, having been long associated with Dr. Williams of our city. As an operator on the eye, Dr. S. has but few equals, and his experience as a clinical lecturer will enable him to render most valuable services to the class.

Mr. Annandale, of Edinburgh, the well known author of a Prize Essay on "Diseases of the Fingers and Toes," has recently published a work on *Minor Surgery*, which is said to be largely stolen from a similar work by Mr. Christopher Heath of London. In the language of the *London Times and Gazette*, there was "already Heath enough in Scotland." It is recorded of Archdeacon Paley that, in his lectures to candidates for the ministry, he was accustomed to say to them, if they *must* preach a *written* sermon every Sunday, he would advise them to *write* one and *steal* five! Now, the biographer of the archdeacon states, that he "must be allowed the first place among those whose success has been most extensive in the *moral* improvement of mankind;" and it is also reported that the above teaching received the sanction of Bishops Burnet and Bull. It is not for us to discuss the question how far *stealing* may grace the clerical robe, or add to the efficacy of preaching; and even admitting, with Paley's biographer, that of his *theological* writings there can be but one sentiment, "that they are alike pious, ingenious and conclusive," we may affirm that our own profession has not yet reached the degree of "moral improvement" which would justify any member in adopting the ethics of Archdeacon Paley as regards the appropriation of the mental labors and language of others, and offering them as our own. With us such offenders are ranked with those whose insignia are of a *peculiar* stripe, and who are deemed worthy of apartments better known for their retentive than their ornamental arrangements. We have plenty of laborers in the professional vineyard, and neither suffering humanity, nor the advancement of our science, demand such *extra* toil as to lead to the necessity of *writing one* (book) and *stealing* five!

The *London Lancet*, July 14th, notices in very complimentary terms the new "Atlas of Surgical and Topographical Anatomy," by B. J. Berand, Surgeon and Professor, Paris. It is to be completed in ten monthly parts, two only having yet appeared.

Obituary.

The *London Lancet*, July 14, reports the death of the well known aurist, Mr. Joseph Toynbee. The cause of his death may be understood from the following: "The jury, having consulted a few minutes, returned the verdict:—That the deceased met with his death accidentally, while prosecuting his experiments, by inhaling a combination of chloroform and prussic acid; and the jury desire to express their deep sympathy with the family of the unfortunate deceased gentleman."

In its editorial headed Scientific Martyrdom, we find these appropriate remarks: "The most serious lesson to be deduced from the very painful and most lamentable catastrophe which has resulted from Mr. Toynbee's experiments upon himself, is the great danger of such individual self-sacrifice. It is not the first time that eminent members of our profession have, even lately, jeopardized their lives by trying experiments upon themselves with dangerous and poisonous substances, of which the doses

and the effects had not previously been sufficiently ascertained by experiment upon the brute kingdom. Dr. Christison was very near killing himself in testing the effect of the recently introduced Calabar bean upon his own organism, and rather carelessly beginning with a large dose of the powdered bean. He was paralyzed and incapable of articulation, helpless, although conscious, and was as nearly face to face with death as a man well can be and yet escape its jaws. Sir James Simpson nearly fell a victim to his experiments with anæsthetics. There is something heroic and grand in such a death as that of Dr. Toynbee. He is truly a martyr to his earnestness of purpose and generous zeal for the advance of a beneficent art. No soldier in the line of battle, no saint steadfast in theological fidelity, ever lost his life in a purer or nobler cause. But heroism which involves such a sacrifice is only perfectly sanctified by a proved necessity; and although some risk must be run by the original investigators who prove the effect of untried agents upon themselves, yet a risk so great as this might have been avoided; and in grieving over the fate of Mr. Toynbee, in exalting his self-sacrifice and his earnestness of purpose, we can not omit to deduce from his sad though noble fate a caution which other investigators will hardly fail to take to heart."

The same Journal, Aug. 4th, thus announces the death of Sir Charles Hastings, "At the very eve of the thirty-fourth annual meeting of the British Medical Association, the death of its amiable and esteemed President and founder is announced. Sir Charles Hastings has for some time been in delicate health; but his loss will be severely felt. He was born in 1794, and graduated M. D. in 1818. He has rendered great services to the medical profession, and was universally esteemed for his personal qualities no less than for his public labors."

Abraham Brower, M. D.—Many of our readers are already aware that this estimable and highly accomplished physician, for many years a resident of Lawrenceburg, Ind., died on the 1st of August, after a long and painful illness. A suitable notice of his life and death, prepared by one who has been for many years most intimately acquainted with him, will appear in our next number. We will only add that in his death the profession has lost one of its most zealous devotees, and one of its brighest ornaments.

To Correspondents.

Dr. E., North Hampton, Ohio.—We think that a physician who would charge a professional brother for attendance upon his family while he was absent in the army, provided, of course, he was not called upon to go any great distance from home, guilty of mean conduct, and his claim would not be sustained by medical men any where.

Dr. F., Fort Wayne, Ind.—There is nothing new about the "pretubercular stage" of consumption. You will find it fully and most ably treated in Dr. Lawson's work on Phthisis.

Our printer neglected to add to Mr. Fraser's article on Empyema, published in the August number, that it was reprinted from the second volume of the *London Hospital Reports*. In the July number, after printing the extract from a letter by "an army surgeon of twenty years experience," on the treatment of syphilis, instead of Walmer, Kent, (Eng.), the printer substituted Walmer, Kentucky. Notwithstanding every precaution, it does seem impossible to prevent this frequent occurrence of annoying errors.